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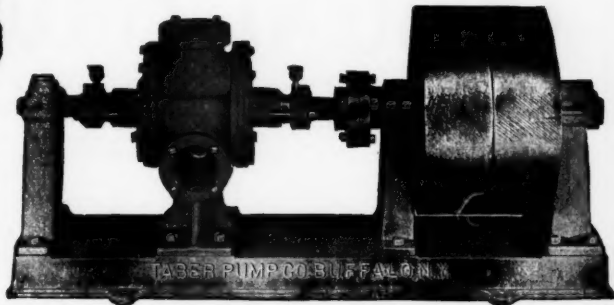
APRIL 7, 1917

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No. 14.

WAR PLANS IN CONNECTION WITH FOOD SUPPLY

Early Conservation Methods May Forestall Some Food Shortage

With the formal declaration of war between the United States and Germany, the food question becomes one of the first importance, both as regards war needs and for the nation in general. This is especially true since observers are predicting a worldwide food shortage for the coming year.

Advices from Rome quote the American representative of the International Institute of Agriculture as announcing a shortage in the world's food crops, and urging the imperative necessity of a mobilization of American agricultural resources. He says:

"For the first time in many years there exists a deficit in the supply of corn, wheat, rye, barley and oats, estimated at a total of 130,000,000 bushels less than the normal requirements for countries open to trade. The situation is worse than was expected last October. The institute's reports indicated then a surplus of more than enough to feed the world until August of this year, when the new crops begin to come in.

"We must profit by Europe's experience before meal tickets become necessary. We can avoid high prices by the eliminating of waste, by the growing of more food and also by effective organization of our food supply, which is more important than getting men into the army.

"Two months after the beginning of the war Germany forbade the use of wheat or rye for feeding livestock and two months later requisitioned all supplies of food. Our first duty is to prevent the manipulation of food supplies, thus obtaining an effective mobilization through the same plan as the Germans."

Following this comes the announcement from Washington that experts of the Department of Agriculture predict that a food shortage more severe than that experienced by any belligerent in the first year of the war, and unprecedented in American history, will come this fall. Short crops last year, enormous exportation of foodstuffs and poor crop prospects for 1917, not only here but in many other countries, have combined to alarm the government.

The Department of Agriculture is turning its entire attention to meeting the problem. Among the steps taken or about to be taken are these:

A mobilization of the agricultural interests of the nation, by Dr. Beverly T. Galloway, former assistant secretary, in co-operation with the Council for Defense. Dr. Galloway will have at his disposal most of the department's 10,000 employees.

Formation of a commercial economy board. Legislation to limit the period of cold storage to prevent speculation in foodstuffs.

Nationalizing the vacant lot garden plan. Encouraging the farmer and truck grower to plant a maximum, guaranteeing him against loss through overproduction.

Federal War Food Board Expected.

A war measure which will be put into effect within a week will be the appointment by the National Government of a Commercial Economy Board, to be made up of the most capable men available, whose duty it will be to control the mobilization and distribution of the food resources of the nation. This step was decided upon on Tuesday by the Council of National Defense, with Secretary of War Baker presiding. Three main objectives lie behind this decision of the government:

1. To avoid the confusion, delays, waste, and inflation of food values which seriously afflicted the British Isles in the first year of the war.

2. To avoid the necessity of appointing a food dictator like Dr. von Batocki in Germany and Lord Devonport in England. The idea of having one man in complete control is not necessarily repellant, the real reason being that it causes a centralization of an immense amount of paper work in one office, which has not worked with the greatest success even in such comparatively small countries as England and Germany, and which will result in a terrible congestion in such a large country as this. Consequently, the appointment of a board will permit of a decentralization which will be efficient without being too loose.

3. It will make unnecessary a long, puzzling and acrimonious discussion by Congress of the varied and contradictory food control bills which will be presented by different members. For instance, five such measures, which will be briefed further on in this article, were introduced on the opening day, April 2.

To Be a Gigantic Task.

It is understood by the government that the work of the proposed board will be immense, and a great sacrifice of time will be required by the big business men who take up the task. Not only will this board go over minutely every scrap of data now possessed by the Department of Agriculture and all other federal agencies. It will be expected to do such a thorough job that a working plan for three years will result, even to the detail of determining just what percentage of meat, grain, vegetables and fruit each stock raiser and farmer in the United States will be permitted to retain for his personal use.

In passing, it may be said that the entire war plans of the government will be on a

three year basis, with a basic unit of an army of 1,000,000 men to provide for. How immense this task will be can be realized by the fact that for every soldier in the field five persons are needed behind the lines to supply his wants in ammunition, food, clothing, medical supplies and incidentals.

This thorough plan of operation, even though it be on paper only at this time, is an astonishing advance in comparison with the happy-go-lucky manner the country has conducted its previous wars. The European war has shown that everything must be done on an immense scale, that everything must be calculated to a nicety, and that the only way we can deliver the goods is to produce results instead of an ocean of words.

Grosvenor Clarkson, Secretary of the Council of National Defense, made this announcement on Tuesday:

"The Council of National Defense will within a day or two announce the formation of a commercial economy board to mobilize the commercial interests of the country for the effective and economical distribution of commodities among the civilian population. Its members will consist of the best qualified men in the nation. Its purpose will be to deal forthwith with problems of war time distribution."

To back up this plan it is understood that the government will even demand drastic regulatory legislation should it become necessary, to insure an adequate supply of all necessities of the millions of men and women who by their efforts will be supplying the armed forces with supplies of all kinds. At first, however, an effort will be made to get along with voluntary compliance with the food regulations.

Food Bills Submitted This Week.

Bills introduced in Congress this week include the following:

H. R. 5.—Proposes the creation of the United States Food Commission, composed of the Secretary of Agriculture, the Secretary of Commerce and the Secretary of Labor. Introduced by Mr. Kelly of Pennsylvania and referred to the Committee on Banking and Currency. The commission would be required to prepare and recommend legislation to enable the government to regulate the transportation, exportation, marketing, preservation and distribution of food. Also to acquire and control all necessary buildings, warehouses, storage houses, granaries, and abattoirs. Co-operation with States, municipalities and present governmental agencies is stipulated and a report to be submitted before May 10.

H. R. 157.—Introduced by Mr. Miller of Minnesota, and referred to the Committee on Interstate and Foreign Commerce. This pro-

vides regulation of cold storage food products in interstate and foreign commerce. Fresh meat and fresh meat products, except in process of manufacture, and all fish, game, poultry, eggs, milk and milk products, and edible fats and oils are referred to specifically. All cold storage warehouses must receive licenses from the Secretary of Agriculture and pay a license fee of \$25 for each warehouse. No food may be kept in cold storage more than eleven months without permission of the Secretary of Agriculture, the extension not to exceed 90 days. Regular inspection and supervision by the Department of Agriculture is provided. The first offense in violation of this act to be punishable by a fine of not more than \$500, or by imprisonment for three months, or both, with a fine of \$2,000 and imprisonment not exceeding one year, or both, for each subsequent offense. The act would also apply to the boxes or refrigerators maintained by wholesale or retail grocers.

H. R. 88.—Introduced by Mr. Hulbert of New York, and referred to the Committee on Military Affairs. This is a duplicate of the bill introduced by Mr. Hulbert at the last session. It provides for the appointment of a commission of not less than three civilian citizens to supervise the food supplied to the military forces of the country. Salaries at the rate of \$5,000 per annum for each commissioner, plus all other necessary expenses are provided. The President may also accept the services of anyone who may volunteer as a member or an assistant, and allow the payment of his actual traveling and other necessary expense.

H. R. 51.—Introduced by Mr. Mondell of Wyoming, and referred to the Committee on Agriculture. It prohibits the importation of foreign meats which have not been inspected and passed in conformity with the meat inspection laws. The Secretary of the Treasury and the Secretary of Agriculture are authorized to draw up all necessary rules and regulations to make the act effective.

H. R. 240.—Introduced by Mr. Raker, of California, and referred to the Committee on Coinage, Weights and Measures. This is another of the standard apple box bills. The standard proposed in this bill is: Depth of end, 10½ inches; width of end, 11½ inches; length of box, 18 inches; all inside measurements, and representing as nearly as possible 2,173½ cubic inches. Each box would have to be marked "Standard."

Many Organizations Help.

Food conservation and distribution will be assisted by a number of organizations throughout the country.

The Boy Scouts, led by the national organization and the New York and Washington branches, working with the slogan, "Let each Boy Scout provide food for one soldier."

The subject will be considered by the Woman's National Farm and Garden Association, which will meet at the National Museum in Washington on April 25, 26 and 27. The association will specialize in gardening plans.

On Tuesday of this week the National Council of Women, representing twenty-seven national women's organizations, met in Washington to consider the establishment of registration offices throughout the country, to enroll women who are willing to enter factories and other industries, or to aid in other practical ways to increase and conserve the food supplies.

The National League of Woman's Service also met in Washington this week for its first general conference. Its purpose is to enroll women to take the places of men who go to war, and also to encourage men to enlist in the Army, Navy and Marine Corps.

Bargains in equipment may be obtained by watching the "For Sale" department, page 48.

BUSINESS MEN EXPEDITE WAR WORK.

Carrying instructions with them for the big work ahead, the chairmen of the committees of the Chamber of Commerce of the United States working under the authority of the Council of National Defense adjourned on Wednesday night after a two-day session at Washington and a final conference with the Secretary of War. The committees were recently appointed for the purpose of co-operating with the army district depot quartermasters in the purchasing of supplies, and to outline a campaign against excess war profits. Each of the fourteen chairmen summoned was present.

Bascom Little, of Cleveland, the general chairman of the National Chamber committees, said that the business men came to Washington to have General Sharpe, Quartermaster General of the Army, instruct them. "As a result of our conference," Mr. Little went on, "General Sharpe, who originated the plan for civilian association with the quartermasters' department, has given the committeemen the widest freedom in the method and manner of committee operations."

Col. William E. Horton, of the quartermaster's department, also spent some time with the committee heads and cleared up many questions which were asked of him. Col. Horton has had a large experience in the quartermaster's department, and is thoroughly familiar with the needs of the service and the manner in which the department operates.

Two points of special importance developed at the conference: First, that the work of the advisory committee should be purely advisory, and concern itself largely with the industries affected by government purchases and the furnishing to the quartermasters of any special detailed knowledge concerning the industries which the civilians are possessed of. The second point was that the committees should have absolutely no authority over, nor control of, the awarding of contracts for supplies, or in determining to whom the contracts should be awarded.

The various chairmen reported they had met with uniform courtesy and co-operation from the depot quartermasters, and expressed the opinion that much good would come from the further development of the association between the army and private business men. It was added that the spirit of co-operation which has manifested itself throughout the entire meeting will unquestionably result in the more speedy organization of the nation for war.

MEAT SUPPLIES IN MARCH.

Official reports of livestock receipts at six centers in March show 28,000 less cattle than a year ago, 120,000 less hogs and 68,000 more sheep and lambs. For the three months of this year receipts of cattle at these six markets were 185,000 in excess of a year ago, hog marketing was 400,000 less and sheep and lamb receipts were about 80,000 more.

Hog receipts at eleven markets in March totaled 2,111,000, compared to 2,424,000 a year ago, 2,430,000 two years ago, and 1,897,000 three years ago, and compared to 2,608,000 in February and 3,583,000 in January. Hog marketing at eleven points for the past three months totaled 8,302,000, compared to 8,875,000 in the same time a year ago, 7,382,-

000 two years ago, and 6,144,000 three years ago.

A synopsis of official reports of receipts at six markets in March is as follows:

	Cattle.	Calves.	Hogs.	Sheep.
Chicago	171,341	56,940	627,825	306,316
Kansas City...	125,436	6,960	185,851	139,695
Omaha	109,548	.....	293,069	214,554
St. Louis	63,365	.....	279,286	21,681
St. Joseph	34,397	2,884	160,656	96,918
Sioux City	47,590	1,460	196,299	11,215

Tl. March, '17.	551,647	68,253	1,742,386	790,379
Tl. March, '16.	579,434	63,723	1,863,522	722,469

Receipts at six markets for three months ending March, 1917:

	Cattle.	Calves.	Hogs.	Sheep.
Chicago	686,111	149,436	2,544,127	894,472
Kansas City...	429,111	25,834	695,037	465,900
Omaha	357,418	.....	1,111,657	735,806
St. Louis	259,119	.....	932,575	78,390
St. Joseph	112,208	10,369	602,911	246,406
Sioux City	145,606	3,318	767,499	63,360

Tl. 3 mos., '17.	1,959,573	188,957	6,653,806	2,482,334
Tl. 3 mos., '16.	1,804,062	149,221	7,117,625	2,401,335

*Calves not separately reported.

MEATLESS DAYS IN ENGLAND.

It is reported from London that Baron Devonport, the British Food Controller, has ordered that, beginning April 15, in hotels, restaurants, boarding houses and clubs there shall be one meatless day weekly. In London the day will be Tuesday. Elsewhere in the United Kingdom it will be Wednesday. The controller has also ordered that no potato or food containing potatoes shall be allowed, except on meatless days and on Friday.

The order imposes restrictions on the quantities of meat, sugar and bread at meals served in hotels, restaurants, boarding houses and clubs. The scale for meat is: For breakfast, two ounces; luncheon, five ounces, and dinner, five ounces. The bread restrictions call for two ounces at all these meals.

Baron Devonport, in explaining the order, said he expected it to result in a saving of 65 per cent. of the meat now consumed, 53 per cent. of bread and 63 per cent. of sugar. He said he had originally intended to order two meatless days, but that he feared this would lead to an increase in bread consumption.

PACKERS TO HOLD MEAT RESERVE.

It was reported from Washington on Thursday that the federal government had issued instructions to the meat packers at Chicago to maintain a permanent reserve of five million pounds of meat and similar food-stuffs there for army purposes. This order was issued to prevent any possible danger of shortage due to pressure of foreign orders or domestic consumptive demand. The government proposes to be ready to feed its troops at any time, regardless of other conditions.

PACKERS RAISE WAGES.

It was reported from Chicago this week that the big packers there have granted increases in pay ranging from 2½ to 12 per cent., effective as of April 1. Armour & Company announced that because of "the oppressive high cost of living," a bonus of \$500,000 would be given to 8,000 salaried employees, principally office help, who draw \$1,800 or less a year. A bonus of \$1,000,000 was distributed last November.

Valuable trade information may be found every week on the "Practical Points for the Trade" page. Do you study this page?

MAKING PACKINGHOUSE LEADERS OF TODAY

Rules Followed in the Development of Armour Men

The latest federal census shows the meat packing industry to be the leading industry of the United States in the point of value of production. The last figures show that the value of packinghouse and allied products in one year was about one and three-quarter billions of dollars, which is several hundred millions of dollars ahead of the nearest competitor, the iron and steel industry.

It has come to be recognized that the development of this remarkable result out of an old-fashioned slaughtering trade is due largely to the genius for organization and business detail shown by the captains and lieutenants of this new industry who have been developed during the past decade or two. Geniuses like P. D. Armour, Gustavus F. Swift and Nelson Morris laid the foundation and paved the way, and under their personal tutelage many of the packinghouse generals of today were developed.

Since J. Ogden Armour coupled with his success as a packinghouse executive a reputation as a magazine writer he has penned nothing more interesting than his article in the March number of the American magazine, in which he relates a lot of personal experiences and incidents connected with the career of a number of Armour men who rose from the ranks to become the captains of the trade they are today.

Self-Trained Man Is the Best.

He begins by quoting the axiom that "the best-trained man is the self-trained man," illustrating its truth in the careers of General Manager M. D. Harding of the Armour Chicago plant, who started in as an office boy; President C. H. MacDowell of the Armour Fertilizer Works, who was P. D. Armour's stenographer, and William E. Pierce, builder of the Armour plant in Argentina, who began as a timekeeper. There were many others in the Armour organization who might have been included with equal aptness in illustrating this point.

"When I am asked to explain the individual successes of some of these men," says Mr. Armour, "I can say only that they were given full opportunity to do their work as they saw fit, and made answerable only for results. The men working with them had the same opportunities, but it was they who brought their faculties into a little fuller play. We try to run our business so that everyone, from the latest office boy all the way up the line, knows the business of the man just ahead of him."

Mr. Armour calls attention to what many people might think an unimportant detail, the hiring of office boys. In the Armour system the office boy is not merely a boy; he is a potential department head, and boys are engaged and handled with that idea in view. If a boy merely wants to work, he is not kept; if he shows ambition to go ahead he is given every opportunity. The only disadvantage of this system, says Mr. Armour, is that the ranks of this class of help are being constantly disrupted by promotions.

Mr. Armour tells of the rise of three of the chiefs mentioned as follows in his article in the American Magazine:

Where Armour Superintendents Came From.

Twenty-five years ago a young man came to Chicago from a little town in Kansas. After

looking several days for a job, and finding none, he drifted out to the stockyards and was put to work as a laborer in the butterine department at \$1.75 a day.

"I was worked so hard," he said afterward, "that I made up my mind to look for another job; but I was too busy during the day and too infernally tired at night."

So the young Kansan stayed on and kept the pace. As soon as he really got his bearings he was setting a new pace, always working a little harder, thinking a little more quickly, than the man beside him. Promotion came, as it is bound to come to men of this type.

Today, John O'Hern, the former Kansas boy, is general superintendent of all our plants.

Take the case of Pierce, whom I have already mentioned. Many years ago he came to us, a timekeeper. Eight or ten other men were doing the same kind of work, and Pierce might have quietly become one of them and never been heard from. But he was not satisfied with being merely a timekeeper; he wanted to know the why and wherefore of every angle of the business with which he came into contact.

While he was in the process of informing himself he discovered that the pay roll had been heavily padded for years—that the names of men not in the employ of the company were carried on it. Any of the other timekeepers might have made the same discovery, but they fumbled the chance.

So Pierce got his first impetus. By proving himself the possessor of a direct, projective mind he was given charge of construction work. Later he became superintendent of the beef end of the business, and when plans were made for building the South American plant it was Pierce whom we picked to do the job.

The Story of MacDowell.

Perhaps the most interesting story of all is MacDowell's, for it shows how a man can win success by always watching for an opening and jumping into it. MacDowell came from a little town in central Illinois, where he had picked up stenography as a diversion and had shown some little ability in making sketches. A friend advised him to get into my father's organization, and he was hired as a stenographer.

In those days my father used to go to Europe every summer, and each year he would have a private telegraph code made up for his use by his secretary. This year the secretary, who was not feeling particularly industrious, turned the job over to MacDowell.

(Continued on page 22.)

No Railroad Rate Increase for the Present

The Interstate Commerce Commission has taken no action on the request of the carriers that it waive the customary suspensions of whatever increased freight rates they may propose in the near future. It is understood that such a proposal has very little show. The commission might cut the suspension limit to thirty days, or it might not even grant this concession.

Following the rush to Washington in the last week of March, the railroad representatives have withdrawn and are understood to be emulating the ant and the busy bee in trying to find out how much of an increase they can ask for and "get away with." They came back to Washington on April 2 with a definite scale of increases, fortified by pleas and data of their own devising.

Twenty-four Western railroads filed with the Interstate Commerce Commission their formal petition asking the commission to amend its rules of tariff publication so as to permit the carriers in Western Classification Territory to make a general percentage advance in freight rates by brief supplements to their existing tariffs, and that such advance be permitted to become effective without suspension. Such an advance in freight rates is declared to be necessary in order to enable the roads "to meet the financial outlay incident to the observation of the Adamson law and incident to other greatly increased operating costs, the increased cost of equipment and of capital and increased taxes, and to meet the demands of the general commerce of the country and the additional obligations that are arising in connection with the plans of national defense." It is declared that these increased costs and obligations cannot be met by the revenue derived from the present basis of rates.

The petition recites that the obligations imposed by the Adamson law, added to the great advance in wages, fuel, materials, supplies and equipment which have occurred recently, operate as continuing factors in greatly decreasing the net operating income; that additional equipment and improvements in operating facilities have become impera-

tively necessary due to the changes in nature, volume and general distribution of the commerce of the country, and that to facilitate the movement of such commerce and to preserve and promote the commerce and industrial interests of the country large sums of money must be expended by the carriers for additions and betterments. It is also stated that the carriers "are confronted with the necessity of making, and desire to make promptly, adequate provision for serving the needs of the nation in railway transportation incident to the national defense"; that "adequately and efficiently to carry out their obligations in this behalf and to meet the necessities of the present crisis, large sums of money must be expended in providing and preparing facilities, and serious interference with their commerce and diminutions of earnings therefrom will necessarily result from the preferred and expedited service to be required in this behalf."

The carriers also represent "that they are now in great need of, and will require in the very near future, large sums of new capital for the improvement, betterment and necessary extension of their properties and that, under present conditions, they encounter increased cost of capital in connection with financing improvements, additions and betterments and will in the future be put to the necessity of paying high premiums for capital in view of the great decrease in the net income from their properties."

In order to prevent the great decrease in their net operating income which will result from these causes, the roads ask that their immediate need of an increase in freight rates may be met with the least delay.

The shippers of the country are certain to fight these proposals of the railroads.

ILLINOIS RATES INCREASED.

The Illinois public utilities commission has refused the request of the railroads of that State for a horizontal increase of 5 per cent. in intrastate freight rates. It granted some increases, however, including livestock, but denied increases on packinghouse products.

PRACTICAL POINTS FOR THE TRADE

[EDITOR'S NOTE.—Nothing but actual, bona fide inquiries are answered on this page of "Practical Points for the Trade." The National Provisioner uses no "made-up" queries, with answers taken out of old, out-of-date books. The effort is made to take up and investigate each question as it comes in, and to answer it as thoroughly as time and space will permit, with a view to the special need of that particular inquirer. It must be remembered that the answering of these questions takes time, and that the space is necessarily limited, and the inquirers must not grow impatient if the publication of answers is delayed somewhat. It should also be remembered that packing house practice is constantly changing and improving, and that experts seldom agree, so that there is always room for honest difference of opinion. Readers are invited to criticize what appears here, as well as to ask questions.]

PACKINGHOUSE POULTRY FOODS.

The following inquiry comes from a Western packer:

Editor The National Provisioner:

Kindly advise us if you have any formula for chicken feed as customarily supplied by packing houses, made from the residue of their cooking tanks.

Packing house poultry foods are made from tankage, blood, bone, cracklings, etc., using, of course, fresh clean material. Tankage from lard and edible beef fats tanks and kettles is subjected to hydraulic pressure to extract all moisture and grease possible, after which it is dried, ground and screened, then bagged and stored in a dry, airy, cool room, taking care that heating must not obtain to the slightest degree.

Beef and hog tankage analyze respectively: Protein, 60 per cent. and 46 per cent.; fats, 8 per cent. and 10 per cent.; phosphates, 6 per cent. and 6 per cent. This may be fed to the fowl straight or mixed with grain, etc.

Blood meal is a highly concentrated protein, analyzing upwards of 85 per cent., and has eight times the strength of a pound of corn and five times the strength of a pound of wheat bran. It is claimed that a teaspoonful of blood meal in a calf's food daily will not only build up muscle and bone, but will prevent "scours," sometimes fatal in calves. The blood is cooked—not boiled—all the mois-

ture extracted by means of hydraulic pressure and steam coils, then ground and finally screened through a fine mesh, about twelve.

Cracklings, beef or hog, ground to the size of a split pea, makes an excellent poultry food, very easily fed and just the right size for the fowls to eat.

Bone for poultry food should be steam, not raw bone, and either ground coarse or fine, thoroughly dried and free from grease. Being rich in phosphate of lime, it is invaluable in the process of eggshell and bone building, and should be placed in a clean place, where it will be accessible at all times to the fowl.

Raw cut bone, while to some extent beneficial, should be fed to poultry sparingly, not more than an ounce to each fowl twice per week. An overdose results in digestive derangement and consequent lessened egg production and flesh gain.

Beef cracklings, from which the grease has been entirely extracted, together with grain, has been proved a rapid fattening food.

As a flavoring agent oil of aniseed or fennel is sometimes used; a very small amount is necessary to impart the desired flavor. Fresh clean material, absolute cleanliness, thorough drying and grinding and avoidance of heating are points to be observed.

LEBANON BOLOGNA RECIPE.

A subscriber in Pennsylvania writes as follows:

Editor The National Provisioner:

Can you give me a formula for making Lebanon bologna?

The following information was published on this page not very many months ago in response to another inquiry of the same sort:

Lebanon bologna is a dry sausage, entirely composed of lean beef freed of sinew and bone. It is first ground coarse through a quarter-inch plate, then reground through a

7-64 plate, and finally "rocked" for about 20 minutes, the seasoning being added during the "rocking" process, after which the mass should go to the mixer and be thoroughly amalgamated for from 5 to 10 minutes.

The mixed seasoned meat should then be spread on tables in a cooler for three or four days. Spread the meat about eight inches thick on the tables. Stuff in sack pieces of beef bungs and hang in a temperature of about 48 degs. F. until the casing becomes reasonably dry.

Then hang in the smokehouse and subject to a cold smoke around 60 degs. F. for not over a week or ten days, or perhaps two weeks. When taken from the smokehouse hang in the drying room, temperature of which should be around 48 degs. F., and allow to remain about three months, or until thoroughly dry.

Use no water, as this is a "dry" sausage and when properly cured should slice like dried beef and show about the same color.

To 100 lbs. of beef use about 3½ lbs. of salt and 1½ oz. of refined and pulverized saltpeter and the same amount of sugar. Spices as follows, fresh ground: Quarter pound of ground black pepper, 6 oz. ground coriander, 5 oz. ground mace, 2 oz. allspice and 1 oz. of ground cloves.

Meats must be absolutely fresh and thoroughly chilled. At no time during the process should the meats be kept in a temperature above 50 degs. F., except when in the smokehouse, and then not over 60 degs. F. Do not allow the sausage to encounter damp air or frost, nor get dry too rapidly through too brisk a circulation of air, which hardens and wrinkles the outside.

Packinghouse, provision, refrigeration and other machinery and equipment at second-hand. Buy it or sell it through The National Provisioner's "Wanted and For Sale" department on page 48.

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THE NATIONAL PROVISIONER

New York and Chicago

Official Organ American Meat Packers
Association

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Correspondence on all subjects of practical interest to our readers is cordially invited.

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PUBLISHERS' STATEMENT.

Statement of the ownership, management, etc., required by the Act of Congress of August 24, 1912, of THE NATIONAL PROVISIONER, published weekly at New York, N. Y., for April 1, 1917.

State of New York) ss.
County of New York)
Before me, a Notary Public, in and for the State and county aforesaid, personally appeared George L. McCarthy, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The National Provisioner, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager, are:

Name of Post Office address.
Publisher, Food Trade Pub. Co.
116 Nassau St., New York, N. Y.
Editor, Paul I. Aldrich.
116 Nassau St., New York, N. Y.
Managing Editor, Paul I. Aldrich.
116 Nassau St., New York, N. Y.
Business Manager, Geo. L. McCarthy.
116 Nassau St., New York, N. Y.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent. or more of the total amount of stock) Food Trade Pub. Co., 116 Nassau St., New York, N. Y.; Estate of J. H. Senner, 116 Nassau St., New York, N. Y.; Julius A. May, 116 Nassau St., New York, N. Y.; Geo. L. McCarthy, 116 Nassau St., New York, N. Y.; Hubert Cillis, 116 Nassau St., New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

(Signed) GEO. L. MCCARTHY,

Business Manager.

Sworn to and subscribed before me this 26th day of March, 1917.

(Seal) MARTHA B. PHILLIPS.
(My commission expires March 30, 1917.)

WAR

What may prove to be the most momentous act in the history of the United States since the Declaration of Independence—certainly the most important since the Emancipation Proclamation—has come. The declaration of war against Germany means far more than the action of one nation against another, as has been so ably stated by master minds, and the ultimate results are for the future to reveal.

This country has made its decision after a period of deliberation which has perhaps exceeded that of any other country under similar circumstances. It is not the hasty, feverish, volatile act of an impetuous nation, but is one which comes after a long series of events in which it will be eventually conceded that this Government has been patient to the last extreme.

Whatever may be said of the underlying reasons for the beginning of the world war, in so far as they relate to the countries which have entered it; whatever charges may be made against them that they did so for selfish or racial reasons, cannot apply to the causes which actuated the United States, after so much forethought, in becoming an active party to the conflict.

Our reasons for taking so tremendous a step forward in our national policy could not be better stated than in the historical words of the President, and underlying them for many months has been the strong, responsive feeling of our people that whenever our Government felt that the time for action had come there would be a ready, serious, forceful response.

In view of the long expectation of the event, the act of war itself has been responded to in magnificent fashion. It has not taken the form of fireworks and oratory, but rather there has been in evidence the deep-rooted, manifest feeling of our people that when the die was cast there would be just as ready and as loyal a response as was ever made to any demand of this Government. It has taken the form of a resolve and a willingness to incorporate into the national defense the full force of America. On every hand, in the places of finance, labor and in all the walks of life, there is apparent the desire to become a part of the great machine which will now be necessary to do the work at hand.

The situation evidences the training which American industries have had during the last several decades. It is the training of efficiency, "team-work" and discipline. It is not the discipline of Mars, but it is just as effective and just as necessary now.

It is fortunate for us that in recent years, through our study of efficiency, so many very large industrial organizations have been founded and operated so successfully. The

training and experience which in peaceful life has made these vast organizations so effective in production and distribution will be ready at the call of the Government. And whatever emergency may arise, there is no question but that there will be a ready response from every American citizen, whether the call comes from the Army and Navy or for the vast economic machinery which is necessary to maintain them.

It will take a little time to co-ordinate all of the industries which the Government will require, but that it will be done in the shortest possible time, that it will be done with the least friction, and that it will be most effective when in operation, goes without saying.

The meat packing business will be a most important element in the ultimate success of our war operations, both as they apply to the feeding of our military forces and in the uninterrupted provision for the civilian population. It will certainly compare most favorably with any other industry which can be mentioned, in its loyalty to the Government, to the people and to its reputation for efficiency whenever and wherever required.

MEAT PRICES AND DEMAND

We have not heard anybody say anything much lately about the packers being responsible for the present abnormally high meat prices, but we may expect it any minute. The trade is sure to be blamed by those who do not look at the facts as reflected in the livestock markets. Live hogs at 15 cents cannot be cut up by any packer at a profit, except the Canadian trade at this time. Southern pork trade, usually good, has fallen off almost to the vanishing point, and domestic consumption everywhere is rapidly "slumping." It is indeed a time for grave consideration of the situation. Mud-slinging will not help; it only makes its dupes the more unhappy.

Less cattle were marketed at packing centers last month than a year ago, and beef cattle reached a record top of 13 cents during the month. Lambs commanded a record top price of 15½ cents, despite a supply slightly above that of a year ago. Hogs reached the unheard of price of 15½ cents alive, and no one knows when they will stop climbing.

Hog receipts at eleven markets in March were over 300,000 head less than a year ago, and for the year to date the shortage is over half a million head. All grades of hogs in Chicago in March cost the packers an average of 14.80 cents a pound, a record average price. A year ago they cost packers an average of 9.65 cents. A comparison of livestock and product market quotations will indicate even to the novice where the trade "gets off" on this basis.

TRADE GLEANINGS

Fire caused damage of \$1,500 in Morris & Co.'s plant at Kansas City, Kan.

The city of Snyder, Tex., contemplates building a garbage disposal plant.

The Willapa Valley cheese factory, near Raymond, Wash., has been destroyed by fire.

Ellsworth Ronan has purchased the rendering works in DeKalb, Ill., formerly operated by William Ballou.

The Delaware Hog Farms, Inc., Wilmington, Del., has been incorporated with a capital stock of \$50,000.

J. S. Anderson's packing plant at Delano and Park avenues, Muskegon, Mich., has been destroyed by fire.

The Ogden Packing & Provision Company, Salt Lake City, Utah, has increased its capitalization to \$2,000,000.

The Utah Packing Company, Salt Lake City, Utah, has been incorporated with a capital stock of \$500,000.

The capital stock of the Standard Sausage Company, Chicago, Ill., has been increased from \$11,000 to \$110,000.

The Prattville Commercial Club, Prattville, Ala., are contemplating the establishment of a canning and packing plant.

Tobin & Shannon, Stock Yards, Jersey City, to deal in cattle, livestock, etc., has been incorporated with a capital stock of \$100,000.

H. Q. Alexander, E. C. Faires and J. Z. Greene have incorporated the North Carolina Farmers' Union Co-operative Fertilizer Co., Raleigh, N. C.

Alko Oil Company, Portland, Me., to pre-

pare for market crude petroleum, animal, vegetable and other oils, etc., has been incorporated with a capital stock of \$100,000.

The Sallir Oil & Gas Company, Portland, Me., to prepare for market crude petroleum, animal, vegetable and other oils, etc., has been incorporated with a capital stock of \$500,000.

Newfane Preserving Co., Inc., Newfane, N. Y., to deal in food products, etc., has been incorporated with a capital stock of \$25,000 by D. Brookins, I. B. Warren and B. C. Warren.

J. Lowenstein & Son, New York; N. Y., wholesale butchers, have been incorporated with a capital stock of \$10,000 by Jacob Lowenstein, Benjamin Lowenstein and Cora Lowenstein.

Plans for the packing plant to be established at Grand Forks, N. D., by the Northern Packing Company are being rapidly advanced. H. R. Elliott of Duluth, Minn., will be manager of the company.

Peerless Sal-O-Well Company, Inc., Buffalo, N. Y., to manufacture soaps, cleaning compounds, etc., has been incorporated with a capital stock of \$50,000 by George W. Smith, Glenn S. Salisbury and L. C. Wilkie.

Thousands of gallons of coconut and other oil products consumed in a fire that destroyed the plant of the India Refining Company, Swanson and McKean streets, Philadelphia, Pa. Total damage estimated at \$200,000.

Geiser & Scholz, Inc., Schenectady, N. Y., to conduct a livestock and meat business, has been incorporated with a capital stock of \$2,000. The incorporators are: Albert J. Geiser, Catharine Geiser and Wilhelm Scholz.

The Gallagher Method Corporation, Eddy-

ville, N. Y., treatment and preservation of meat, fish, vegetables and fruits, has been incorporated with a capital stock of \$100,000 by Ralph S. Moore, William Petersen and Frederick A. Girling.

The Union Stockyards, Macon, Ga., has been organized with Homer D. Cogdell of Chattanooga, Tenn., as president; J. P. Peacock as vice-president and W. H. Peacock, secretary and treasurer, both of Cockran, Ga. Capital stock, \$10,000.

G. A. Copeland, 213 St. John's Place, Brooklyn, N. Y.; C. Rousseil, 168 East 33rd street, New York, N. Y., and W. H. Griffin, Mahwah, N. J., have incorporated the Pacific Hide & Produce Company, Inc., Esopus, N. Y., to deal in all products in hide, leather, etc. Capital stock, \$150,000.

Contract has been let by the Hill County Cotton Oil Co., Hillsboro, Tex., for the erection of a two-story, 85 x 110 ft. building of reinforced concrete. The officers of the company are: President, G. L. White; vice-president, W. C. Robertson; secretary, Ed. Woodall; manager, C. G. Denman.

STOCKS OF PROVISIONS.

Official reports of stocks of provisions at leading centers at the end of March are synopsis as follows:

	Pork, Bbls.		
	March 31, 1917.	Feb. 28, 1917.	March 31, 1916.
Chicago	46,135	47,856	64,445
Kansas City	4,573	6,346	5,753
Omaha	4,326	3,895	3,633
St. Joseph	3,281	4,099	2,831
Milwaukee	5,356	7,086	6,623
Total	63,671	69,312	83,285
	Lard, Lbs.		
Chicago	44,281,163	51,416,286	91,535,135
Kansas City	3,383,380	2,060,822	5,150,300
Omaha	2,792,652	3,926,406	4,747,103
St. Joseph	2,379,732	3,621,921	2,616,657
Milwaukee	656,000	679,800	2,760,500
Total	53,492,927	61,905,235	106,800,695
	Cut Meats, Lbs.		
Chicago	128,843,541	139,624,175	133,648,639
Kansas City	46,571,800	52,782,000	53,417,900
Omaha	46,889,516	43,591,501	49,786,805
St. Joseph	33,637,242	35,726,082	31,446,546
Milwaukee	14,533,226	19,258,237	16,753,958
Total	170,495,325	290,381,995	285,253,548

PROPOSAL

PROPOSALS FOR INDIAN SUPPLIES, Department of the Interior, Office of Indian Affairs, Washington, D. C., March 29, 1917.—Sealed proposals, plainly marked on the outside of the sealed envelope: "Proposal for groceries," etc., as the case may be, and addressed to the "Commissioner of Indian Affairs, U. S. Indian Warehouse, 265 East Illinois Street, Chicago, Ills.," will be received until 1 o'clock p. m. of Wednesday, May 2, 1917, and then opened, for furnishing the Indian Service with groceries, glassware, agricultural implements, wagons, school supplies, desks, automobile supplies, etc. Schedules giving all necessary information for bidders will be furnished upon application to the Indian Office, Washington, D. C., and the U. S. Indian Warehouses at Chicago, St. Louis and San Francisco. The department reserves the right to reject any and all bids, or any part of any bid.

CATO SELLS, Commissioner.

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Hartford City, Indiana

PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the barrel, except lard, which is quoted by the hundredweight in tierces, pork and beef by the barrel or tierce and hogs by the hundredweight.

Prices Firm—Demand Continued—Shipments Large—New High Levels—Stocks Decrease—Distribution Unchecked—Bullish Political Situation.

New high provision records have again been made this week, with trading again on broad volume, influenced by the expectation of continued cash demand, and the demonstration as shown by the stocks that the high prices are not materially restricting the shipments out from packing centers. The monthly product statement which was issued on the 1st of April was quite an important one showing that the demand for meats and lards were affecting the supplies, notwithstanding the fact that the prices had advanced to abnormal height and the situation is becoming most extraordinary. The figures for the stocks at Chicago not only show supplies of lard much less than last year, but also a marked decrease for the month, while the total stocks of meats decrease 11,000,000 lbs. for the month, and are 5,000,000 lbs. less than last year. The monthly statement follows:

	April 1, 1917.	March 1, 1917.	April 1, 1916.
Mess P., reg., bbls.	11,963	11,462	11,932
Mess P., old, bbls.	62	335	7,677
Other pork, bbls.	34,110	38,089	44,836
Lard, con., lbs.	24,960,264	30,502,351	74,385,323
Lard, old, lbs.	2,695,210	7,310,283	4,707,800
Other lard, lbs.	16,625,689	13,608,672	12,442,512
Sh. rib sides, lbs.	15,482,732	19,821,000	23,187,473
Ex. Sh. Clr. S., lbs.	1,359,958	1,394,247	775,851
Total meats, lbs.	128,843,541	139,024,175	133,848,639

The receipts of product at Chicago continued quite liberal, but this is more than offset by the shipments. The receipts of cut meats have increased this season 32,000,000 lbs. over last year and lard receipts have increased 11,000,000 lbs. Shipments have been very good and the shipments of fresh meats have been particularly heavy.

The weights of hogs have not been quite as heavy as last year possibly due to the attractive price on one hand and also to the high price of feedstuffs on the other. The receipts and shipments at Chicago for the month and the average weights compared with last year follow.

	Received, No.	Av. wt., lbs.	Shipped, No.
1917.....	657,075	209	131,223
1916.....	754,045	214	144,210
Decrease	96,970	5	12,987

Prices have now reached such a level that the daily average for hogs is well above last year. For the past week the average price of hogs of 15.05c. was the highest on record and the average price of sheep of 12.35c. was also the highest on record. The average of all live stock for the week, compared with the averages for the corresponding week in previous years, follow:

	*Hogs.	Cattle.	*Sheep.	Lambs.
Last week	\$15.05	\$11.65	\$12.35	\$14.30
Previous week	15.00	11.80	12.05	14.40
Cor. week, 1916.....	9.60	9.15	8.30	10.80
Cor. week, 1915.....	6.85	7.55	7.50	9.25
Cor. week, 1914.....	8.65	8.30	6.20	7.50
Cor. week, 1913.....	9.20	8.50	6.40	8.50
Cor. week, 1912.....	7.90	7.40	5.85	7.65
Cor. week, 1911.....	6.40	6.30	4.50	5.90

Cor. week, 1910.....	10.60	7.50	7.55	8.70
Cor. week, 1909.....	7.00	6.10	5.80	8.10
Cor. week, 1908.....	6.10	6.45	6.25	7.70
Cor. week, 1907.....	6.80	5.60	5.85	7.90

*Highest on record.

In this connection a comparison of the prices of product will be of interest. The quotations showing the high and low prices from the beginning of the season and the high and low prices for the two days this month with the closing prices on Thursday, follow:

	Season—		Since April 1.	
	High.	Low.	High.	Low.
Pork—				
May	3490	2287	3490	3475
July	3410	2675	3400	3355
Lard—				
May	2030	1342	2030	1995
July	2042	1590	2042	2012
Sept.	2060	1985	2060	2025
Ribs—				
May	1845	1400	1842	1820
July	1870	1507	1862	1845

The political situation is undoubtedly largely responsible for the price situation. The trade has become convinced that the entrance of the United States into the war will add to the demand for cured product and there will be very heavy distribution while there will also be undoubted effort made to supply the Allies with as much foodstuff as possible. This will mean large exports of provisions of all kinds. The price of feedstuffs is maintained. The demand is such that there is little or no prospect for a recession in the buying anticipated, while with corn selling at one dollar and twenty-five cents at the West there is no opportunity for any low priced hogs.

In regard to the foreign buying of Ameri-

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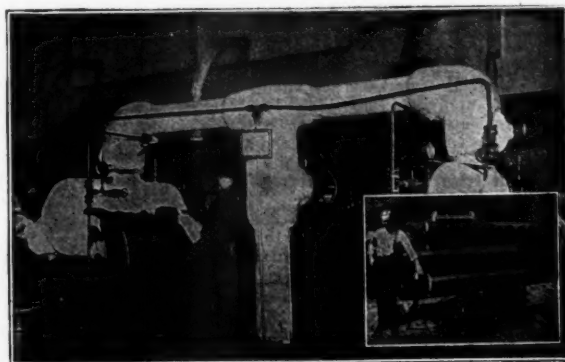
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can foodstuffs the comparison of the exports of leading foodstuffs, the following will be of interest for 8 months, July 1 to Feb. 1:

	8 months—July 1 to Feb. 28	1916-17	1915-16	1914-15
Wheat, bu.	100,550	118,999	192,721	
Flour, bbls.	7,667	9,958	10,809	
Total as wheat, bu.	135,051	163,008	241,362	
Corn, bu.	38,506	18,335	23,287	
Oats, bu.	60,324	55,630	47,410	
Rye, bu.	9,891	9,471	9,147	
Barley, bu.	11,973	19,878	21,947	
Bacon, lbs.	431,059	388,108	161,123	
Hams and shoulders, lbs.	173,545	181,097	95,965	
Pork, lbs.	57,837	90,246	25,007	
Lard, lbs.	285,209	256,213	316,810	
Cotton oil, lbs.	86,029	187,507	183,643	
Oleo oil, lbs.	48,549	73,541	44,796	
Neutral lard, lbs.	12,718	23,634	11,872	
Lard compounds, lbs.	35,813	37,024	45,645	

LARD.—Steady further advance was again made in case lard. Prices were at new levels and offerings are small at the advance. Stocks are small and are not increasing, notwithstanding the extreme prices paid. Quoted city, \$21.25; Western, \$21.40@21.50; Middle West, \$21.30@21.40; refined Continental, \$22.40; South American, \$22.60; Brazil kegs, \$23.60; compound, \$16.12@16.50.

BEEF.—The market was again higher. Demand is persistent and with the small available supplies for sale and to cure demand steadily advances prices. Mess, \$25@26; packet, \$26@27; family, \$28@30; extra India, \$45@47.

PORK.—The market was very steady again. Further advances were made and the high prices do not seem to stop the buying. Mess, \$37@38; clear, \$38@41, and family, \$40@42.

SEE PAGE 29 FOR LATER MARKETS.

MAKING PACKINGHOUSE LEADERS.

(Concluded from page 17)

Instead of getting up an ordinary code on a few sheets of paper, MacDowell designed a little booklet, bound it in seal, and printed the code in illuminated letters. The next day the secretary handed in the code.

"You didn't do this," said my father.

"N-n-o-o, sir," stammered the secretary.

"Who did? . . . Send him to me."

"Young man,"—as MacDowell came into the office—"how did you happen to get my code up in this shape?"

"I thought it would be handier for you, sir."

"When did you do the work?"

"At home, nights."

"H-m-m! Glad to know it."

A few days later MacDowell was given a desk in the front office, and not long afterward he was appointed to succeed the secretary.

MacDowell's next opportunity came when my brother decided to build a barn. Knowing that the young secretary had some sketching ability, he asked him to draw up a rough plan. The matter was not of tremendous importance, but MacDowell had the habit of giving his best effort to seemingly unimportant things. He went to some architect friends, found out the laws of stress and strain, and got their advice and help about the project.

The plan MacDowell turned in was so splendidly executed that he was given a chance at more construction work around the yard. Immediately he began attending night school, studying higher mathematics and draftsmanship, and applying everything he learned to the problems at hand. In these days he was working from four-thirty in the morning until nearly eleven at night. Finally he got so worn out from the strain that my father sent him out West for a vacation.

But MacDowell belonged to the type of men who never overlook opportunity. In Arizona he discovered that the butter on sale was very inferior, and that butterine and oleomargarine were practically unknown. He sent on for a cargo of fifty-pound pails of these products, and handed them out among the merchants. He started up a good trade, found other openings, and before he came back to Chicago he had sold twelve carloads of packing house products.

On his return he was put in charge of the butterine exhibit at the Chicago World's Fair.

NO EXPORT INFORMATION

The U. S. Treasury Department has issued orders to Collectors of Customs to discontinue for the present the giving out of all detailed information of exports from the United States. This information therefore will not appear in the columns of The National Provisioner until such time as the Government recalls this order.

Here he saw some exhibits of German potash. Investigation showed him that our company was in a strategic position to make fertilizers, and he convinced my father of the wisdom of venturing in the new line. He was put in charge of fertilizer manufacturing, and now he is president of the Armour Fertilizer Works, one of the most important branches of our business.

Making Investments in Men.

Mr. Armour says he looks upon every boy and young man as an investment, to be developed accordingly. A superior who finds fault with a boy without telling him why is likely to "get fired," instead of the boy! He tells of boys who, properly disciplined, have become important cogs in the business machine.

He is also a believer in "home-made product." He says that "if in filling an important position tomorrow I had to choose between a man of ordinary ability who had trained himself in our employ, and a man from the outside apparently more brilliant, I would not hesitate a moment in deciding. The home-made product would get the job. If the day ever comes when this company will have to go outside its own organization for its leaders, I shall feel that we have failed to live up to our opportunities and our ideals."

He also says that in choosing between experience without education, and education without experience, he selects the former. Department heads who have come up from the ranks are naturally more inclined to give other men opportunities for self-development. Men who attract attention as worthy of promotion will seven times out of ten grow up to their job if given the chance.

Mr. Armour also discusses two common failings of executives—the reluctance to promote a good assistant who may show up more brilliantly than they, and a disposition to perform many minor duties instead of delegating them to men whose time is less valuable. The capable executive is a master of his time, and he systematizes his minutes, says Mr. Armour. He discusses also the value of "understudies," men trained to take a superior's place in case of need; the danger of a business run on the "one-man plan" is indicated. He continues:

We try to run things here so that every man knows the duties of the man just ahead of him. We encourage men to be inquisitive, and we satisfy their curiosity. Sometimes, if that man ahead is not looking sharp, he finds himself shoved out automatically by a pushing chap behind him. We try to guard against any such thing as an automatic foreclosure of opportunity to anyone.

The right sort of man doesn't have to find opportunities; he makes them. He may make mistakes, too, but that is all part of the venture. "Empty things don't slop over," as Henry Ward Beecher once remarked. What is more, I have found that when a man does

make a mistake it does not pay to criticize him too severely. He will be afraid to assume responsibilities in another emergency, and responsibility is the thing that makes men.

Thoroughness and Sentiment.

Thoroughness is a quality never lacking in successful men, no matter what their other characteristics, says Mr. Armour. Half-way folks may "get by," says he, but they never get far. In concluding he touches upon sentiment in business and the relation of business to the individual as follows:

Sentiment in business was never more alive than it is today. Any able employer of labor knows that kindness and fairness build the cornerstone to a man's best effort. From a purely commercial standpoint, discarding all other reasons, they are the soundest investments in the world. You can buy a man's work, but you cannot buy his loyalty. That can be gained only by treating him fairly. I have declared repeatedly that any success which has come to me has been due almost entirely to the loyalty of my men and their eagerness to please me. I consider this sentiment of more value in dollars and cents than the entire financial investment in our business.

I do not want my men to work because they fear me, or because they are afraid of losing their jobs. I want them to work because they want to work, and because they would rather work here than any other place in the world. A man is no good to me unless he is necessary to Armour & Company, and we are necessary to him.

As a matter of practical business common sense, I make it a rule that my door shall always be open to my men, and any employee, down to the humblest day laborer, may feel free at any time to bring his troubles to me directly. My job would not be worth while under any other conditions.

In the last analysis, a business and an individual have much the same characteristics; they make friends and enemies in exactly the same ways, and nothing pays either quite so well as to be fair.

EXPORTS OF PROVISIONS

Exports of hog products for the week ending March 31, 1917, with comparisons:

To—	PORK, BBLs.		
	Week ending Mar. 31, 1917.	Week ending Apr. 1, 1916.	From Nov. 1, '16, to Mar. 31, 1917.
United Kingdom..	305	150	3,120
Continent .....	.....	.....	2,165
So. & Cen. Am.	353	720	5,921
West Indies	41	429	16,374
Br. No. Am. Col. ....	.....	327	3,966
Other countries....	.....	17	319
Total	699	1,643	31,806

To—	MEATS, LBS.		
	Week ending Mar. 31, 1917.	Week ending Apr. 1, 1916.	From Nov. 1, '16, to Mar. 31, 1917.
United Kingdom..	4,440,975	9,686,675	235,022,050
Continent	7,498,550	5,494,675	112,596,068
So. & Cen. Am.	47,331	65,601	991,897
West Indies	132,065	340,903	4,164,974
Br. No. Am. Col. ....	.....	.....	239,124
Other countries....	.....	25,724	396,590
Total	12,118,921	15,613,578	353,410,533

To—	LARD, LBS.		
	Week ending Mar. 31, 1917.	Week ending Apr. 1, 1916.	From Nov. 1, '16, to Mar. 31, 1917.
United Kingdom..	3,781,550	1,720,800	78,841,298
Continent	914,250	1,695,880	102,665,721
So. & Cen. Am.	111,914	865,700	11,603,215
West Indies	61,726	137,122	8,442,193
Br. No. Am. Col. ....	.....	.....	97,893
Other countries....	196,238	4,206	711,171
Total	5,065,678	4,423,708	202,361,491

RECAPITULATION OF THE WEEK'S EXPORTS.			
From—	Pork, lbs.	Meats, lbs.	Lard, lbs.
New York	699	12,118,921	5,065,678
Total week	699	12,118,921	5,065,678
Previous week....	1,307	6,533,053	6,689,173
Two weeks ago....	967	20,424,027	17,432,875
Cor week last y'r	1,643	15,613,578	4,423,708

COMPARATIVE SUMMARY OF EXPORTS.			
	From Nov. 1, '16 to date.	Same time last year.	Decrease.
Pork, lbs.	6,361,000	11,013,200	4,652,200
Meats, lbs.	353,410,533	364,708,026	11,297,473
Lard, lbs.	202,361,491	223,566,026	21,204,535

TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—The market has continued strong. One of the largest of the consumers entered the market this week and paid as high as 13½ cents for city specials loose. Sentiment seemed very bullish because of the vigorous advance in other products, chief among which were cotton oil and lard. The offerings of tallow at the advance did not increase heavily, suggesting that producers are keeping well sold up at the very high comparative prices.

The political situation was bullishly construed. War moves of the United States against Germany were taken to indicate a large demand for tallow and other products for our government, while there is the firm belief that larger financial credits to be granted to the Allies will result in larger exports. Naturally with these influences affecting kindred markets to tallow in a bullish way, tallow must sympathize.

Advices from abroad are without much influence; peace rumors are overshadowed by the new war moves. The London auction sale this week was of fair offerings and unchanged prices, a reflection of the government control in Great Britain.

Prime city tallow in the local market is quoted at 13 cents nominal and city specials, 13½ cents bid, loose.

OLEO STEARINE.—The trade has been larger and prices higher. A fair business is claimed at the sixteen cent level. Strength in the lard and compound lard markets explains the higher prices for oleo stearine.

OLEO OIL.—The market was again firm with a moderate further advance paid. Export interest was very limited. Extras are quoted at 21@21½c., nom., and medium at 20@20½c., nom.

SEE PAGE 29 FOR LATER MARKETS.

SOYA BEAN OIL.—The situation is very interesting. Prices for competing oils have advanced very rapidly and the discount of Soya under these oils has been important. Prices have improved quite rapidly and large transactions are reported. Arrivals on the coast have been rather disappointing and shipments have been delayed. The price on the coast has been about 10@10¼c. in buyers tanks. And the price here has ruled sharply under cotton oil. Prices have advanced recently and there has been good demand ow-

ing to the relative price. Spot is quoted at 13@13½c., nom.

CORN OIL.—The market is very strong with prices affected by the sharp advance in Soya and cotton oil. Offerings of crude are reported limited. Demand has been good. Prices are quoted 13½c.

COCOANUT OIL.—The market is strong and held higher with competing oils. The market presents the remarkable position of ruling at a discount under cotton oil, where it ordinarily is above cotton oil. Foreign advices indicate a strong market with higher prices for Copra. Prices are quoted: Ceylon, 15@15½c.; Cochin, 20@22c.

PALM OIL.—The reports that an embargo has been placed by the British Government on exports of palm oil from British possessions or any territory controlled by the English have had a decided effect on the market as supplies are small here and under the conditions very little can be obtained for forward shipment. Prime, red, spot, 13½@14c.; Lagos, spot, 14@15c.; to arrive, —; palm kernel, —.

PEANUT OIL.—The market is very firm with small offerings. Prices are quoted at \$1.10@1.15.

NEATSFOOT OIL.—Trade is light at full prices. Prices are quoted 20 cold test, \$1.20@1.30; 30, \$1.15@1.20, and prime, \$1.00@1.10.

GREASE.—The market has shown further advance with other fats and is very firm at the advance. Quoted: Yellow, 12¾@13c. nom.; bone, 12¾@15c. nom.; house, 12¾@13c.

GREEN AND SWEET PICKLED MEATS.

(Special Report to The National Provisioner from The Davidson Commission Co.)

Chicago, April 5, 1917.—Quotations on green and sweet pickled meats, f. o. b. Chicago, loose, are as follows:

Regular Hams—Green, 8@10 lbs. ave., 22¼c.; 10@12 lbs. ave., 22¼c.; 12@14 lbs. ave., 22¼c.; 14@16 lbs. ave., 22¼c.; 16@18 lbs. ave., 22¾c.; 18@20 lbs. ave., 23c. Sweet pickled, 8@10 lbs. ave., 19¾c.; 10@12 lbs. ave., 19¾c.; 12@14 lbs. ave., 20c.; 14@16 lbs.

ave., 20½c.; 16@18 lbs. ave., 21½c.; 18@20 lbs. ave., 21½c.

Skinned Hams—Green, 14@16 lbs. ave., 24c.; 16@18 lbs. ave., 24c.; 18@20 lbs. ave., 24c.; 20@22 lbs. ave., 24c.; 22@24 lbs. ave., 23½c. Sweet pickled, 14@16 lbs. ave., 21½c.; 16@18 lbs. ave., 21½c.; 18@20 lbs. ave., 21½c.; 20@22 lbs. ave., 21½c.; 22@24 lbs. ave., 21½c.

Picnic Hams—Green, 4@6 lbs. ave., 17¾c.; 6@8 lbs. ave., 17½c.; 8@10 lbs. ave., 17¼c.; 10@12 lbs. ave., 17¼c. Sweet pickled, 4@6 lbs. ave., 16½c.; 6@8 lbs. ave., 16½c.; 8@10 lbs. ave., 16½c.; 10@12 lbs. ave., 16½c.

Clear bellies—Green, 6@8 lbs. ave., 28c.; 8@10 lbs. ave., 27c.; 10@12 lbs. ave., 26c.; 12@14 lbs. ave., 25c.; 14@16 lbs. ave., 24c. Sweet pickled, 6@8 lbs. ave., 25½c.; 8@10 lbs. ave., 25c.; 10@12 lbs. ave., 24½c.; 12@14 lbs. ave., 24c.; 14@16 lbs. ave., 23½c.

PORK CUTS IN NEW YORK.

(Special Report to The National Provisioner from H. C. Zaun.)

New York, April 5, 1917.—Wholesale prices on green and sweet pickled pork cuts in New York City are reported as follows: Pork loins, 27@28c.; green hams, 8@10 lbs. ave., 25c.; 10@12 lbs. ave., 24c.; 12@14 lbs. ave., 24c.; 18@20 lbs. ave., 24c.; green clear bellies, 6@10 lbs. ave., 25c.; 10@12 lbs. ave., 25c.; 12@14 lbs. ave., 25c.; green rib bellies, 10@12 lbs. ave., 24c.; 12@14 lbs. ave., 24c.; S. P. clear bellies, 6@8 lbs. ave., 23c.; 8@10 lbs. ave., 24c.; 10@12 lbs. ave., 24c.; 12@14 lbs. ave., 23c.; S. P. rib bellies, 10@12 lbs. ave., 22½c.; 12@14 lbs. ave., 22c.; S. P. hams, 8@10 lbs. ave., 21@22c.; 10@12 lbs. ave., 21@22c.; 18@20 lbs. ave., 23c.; city dressed hogs, 20¾c.; city steam lard, 21½c.

Western prices on green cuts are as follows: Pork loins, 8@10 lbs. ave., 23@24c.; 10@12 lbs. ave., 22@23c.; 12@14 lbs. ave., 20@21c.; 14@16 lbs. ave., 19@20c.; skinned shoulders, 18½@19c.; boneless butts, 23c.; Boston butts, 20c.; spareribs, 15c.; neck ribs, 6c.; lean trimmings, 21c.; regular trimmings, 17@18c.; kidneys, 7c.; tails, 8c.; livers, 7c.; snouts, 7½@8c.; pig tongues, 16½@17c.

EXPORTS SHOWN BY STEAMERS.

Exports of commodities from New York to European ports for the week ending Thursday, March 29, 1917, as shown by A. L. Russell's report are as follows:

Steamer and Destination.	Oil.		Cottonseed		Bacon and Hams.		Tallow.	Beef.	Pork.	Lard.	
	Cake.	Bbls.	Butter.	Bbls.	Pkgs.	Boxes.					
Kristianiafjord, Bergen .....	.....	200	.....	1306	.....	.....	.....	.....	.....	200	.....
Lyngenfjord, Bergen .....	.....	1150	.....	.....	.....	.....	.....	.....	.....	150	.....
*Various, various	1920	3780	667	23282	.....	150	.....	.....	.....	1768	33319
Total	1920	5130	667	24588	.....	150	.....	.....	.....	2118	33319

*Details withheld by steamship company under Government order.

WELCH, HOLME & CLARK CO.

Office and Warehouse

383 West Street

New York City

CAUSTIC SODA

SODA ASH

COCOANUT OIL

PALM OIL

TALLOW

GREASE

STEARINE

COTTONSEED OIL EXPORTS

Exports of cottonseed oil reported for the week ending April 5, 1917, and for the period since September 1, 1916, were:

	Week ending Apr. 5, 1917.	Since Sept. 1, 1916.
From New York—	Bbls.	Bbls.
Africa	10	1,002
Argentina	—	2,235
Australia	—	200
Bolivia	—	77
Brazil	69	911
British Guiana	—	244
Central America	—	513
Chile	14	1,172
Cuba	3	9,066
Denmark	—	5,464
Dutch Guiana	2	738
Ecuador	—	16
England	—	3,356
France	—	2,815
French Guiana	—	709
Haiti	40	169
Italy	—	700
Mexico	—	348
Netherlands	—	39,412
Newfoundland	—	475
Norway	200	17,813
Pacific Islands	—	3
Panama	28	1,414
Peru	—	2
San Domingo	—	1,465
Scotland	—	550
South America	—	1,495
Sweden	—	11,100
Turkey in Asia	—	96
Uruguay	—	1,430
*Various	300	10,105
Venezuela	—	18
West Indies, other	7	5,689
Total .....	.673	120,809
*From New Orleans—		
Cuba	—	1,454
Mexico	—	1,035
Norway	—	23,200
Panama	—	760
West Indies	—	9
Total	—	26,458
From Philadelphia—		
Argentina	—	47
Netherlands	—	5,847
Scotland	—	442
Total	—	6,336
From Savannah—		
Netherlands	—	1,648
Total	—	1,648
From Michigan—		
Canada	7,318	39,878
Total	7,318	39,878
From Buffalo—		
Canada	—	1,750
Total	—	1,750
From St. Lawrence—		
Canada	2	1,426
Total	2	1,426
From Dakota—		
Canada	791	3,449
Total	791	3,449
From Vermont—		
Canada	—	9
Total	—	9
From other ports—		
Mexico	—	9
Total	—	9

Recapitulation—	Week ending Apr. 5, 1917.	Since Sept. 1, 1916.	Same period, 1915.
Bbls.	Bbls.	Bbls.	Bbls.
From New York.....	673	120,809	258,861
From New Orleans....	—	26,458	90,461
From Galveston	—	—	2,174
From Baltimore	—	—	1,499
From Philadelphia....	—	6,336	953
From Savannah	—	1,648	3,580
From Norfolk and Newport News	—	—	4,608
From Boston	—	—	2
From San Francisco....	—	—	221
From Mobile	—	—	3,440
From Michigan	7,318	39,878	49,040
From Buffalo	—	1,750	8,185
From St. Lawrence....	2	1,426	8,966
From Dakota	791	3,449	4,464
From Vermont	—	9	33
From other ports....	—	9	3
Total	8,784	201,772	436,580

*Information withheld by Government order.

POOR OIL MILLING THIS SEASON.

Causes For This Condition Are Set Forth by Experts.

(Special Letter to The National Provisioner from the Picard-Law Company.)

Atlanta, Georgia, April 2, 1917.—The standard of oil milling efficiency during the month of March for the past six years is as follows:

	Meal Standard	Hulls Standard
1912	0.97	2.20
1913	0.99	1.84
1914	0.97	1.98
1915	0.95	1.81
1916	0.88	1.33
1917	0.94	1.71

These comparisons show that the work is considerably under the high standard of efficiency established last season, and is barely equal to the milling of 1914-15. In our opinion this is due to several causes, the most important of which are: The lack of repairs for this season; the difficulty in adjusting all departments of oil milling to meet the new requirements of producing a maximum yield of lint; the composition of seed.

A number of mills were so well satisfied with the milling results of 1915-16, the cost of additional equipment was so excessive and the crop conditions and other financial consideration were so unsettled that the usual amount of repairs was not made in the smaller mills during the past summer.

Milling for the past two seasons and especially this season has almost been revolutionized. When it became necessary to remove the maximum amount of lint from seed in order to meet competition, the effect was noticeable in nearly every department of the oilmill. Up to a certain point the removal of lint from seed improved the milling, as was indicated by the results of the season of 1915-16. The extreme, however, has produced the opposite results now. It is with much difficulty that the mills are able to show good results when removing over 150 pounds of lint to a ton of seed. A number of new machines have been invented and are being used with more or less success, and there is no question but that in time the mills will work out this proposition satisfactorily, but it will take considerable experimental work.

Composition of seed is such this year that a smaller tonnage of high grade meal is produced. This is due to the low nitrogen in the kernel. During the past several months

there has been quite an amount of immature or faulty seed and this causes a low per cent. of kernels. The quality also is not good in these last seed. Our average for March shows only 53.40 per cent. kernel and 19 per cent. damaged. Good sound seed should show about 56 per cent. kernel. The oil made from this quality of seed is not as good as that which was made during the autumn and held in storage up to this time.

After the first of April the color of oil darkens rapidly. It would be wise for those mills who are holding crude oil to have tests made occasionally to see if the quality is keeping up. On nearly 300 samples of crude analyzed in March we find the average color to be 35 yellow and 8 red. Of course, the samples handled by us represent a greater percentage of oils known to be doubtful in quality and the average is not strictly speaking a true indication, but by comparisons with other months we notice that the color is already getting considerably darker.

SOUTHERN MARKETS

Memphis.

(Special Wire to The National Provisioner.)

Memphis, Tenn., April 5, 1917.—Prime crude cottonseed oil strong at \$1.00½ per gal. Prime 7½ per cent. meal steady at \$37. Prime hulls, \$17 loose, \$19 sacked.

New Orleans.

(Special Wire to The National Provisioner.)

New Orleans, La., April 5, 1917.—Prime crude cottonseed oil steady at \$1, f. o. b. mill, all directions; stocks recently greatly reduced; more inquiry for refined. Prime meal, 8 per cent., higher, at \$40; 7½ per cent., \$38; 7 per cent., \$36. Loose hulls, \$17.50; sacked, \$21; all short ton, New Orleans.

Dallas.

(Special Wire to The National Provisioner.)

Dallas, Tex., April 5, 1917.—Cottonseed oil market strong; some trading in prime crude at \$1. Summer yellow, \$1.06. Prime loose cake, f. o. b. Galveston, \$40.

CHEMICALS AND SOAP SUPPLIES.

(Special Report to The National Provisioner.)

New York, April 5.—Quotations on Chemicals and soapmakers' supplies, are as follows: 74@76 per cent. caustic soda, 4½@4¾c. per lb.; 60 per cent. caustic soda, 4½c. per lb.; 98 per cent. powdered caustic soda, 4½@4¾c. per lb.; 48 per cent. carbonate of soda, 3¾c. per lb.; talc, 1½@1¾c. per lb.; 58 per cent. soda ash, 3¾@3½c. per lb.; chloride of lime, 5½c. per lb.; silox, 2,000 lbs., \$15@20 per ton.

Prime palm oil, 13½c. per lb.; clarified palm oil, 15c. per lb.; genuine Lagos palm oil in casks, 14c. per lb.; palm kernel oil, 16@17c. per lb.; yellow olive oil, \$1.35@1.40 per gal.; green olive oil, \$1.40 per gal.; Ceylon coconut oil, 15@15½c. per lb.; Cochin coconut oil, 20@22c. per lb.; green olive oil foots, 13½@14c. per lb.; cottonseed oil, \$1.15@1.18 per gal.; soya bean oil, 13@13½c. per lb.; corn oil, — per lb.; peanut oil, soapmakers, 5 per cent. acidity, \$1.20 per gal.

Prime city special tallow, 13½c. per lb.; brown grease, — per lb.; yellow packers' grease, 12½@13c. per lb.; dynamite glycerine, 54@55c. per lb.; saponified glycerine, 44½c. per lb.; crude soap lye glycerine, 40½c. per lb.; chemically pure glycerine, 55c. per lb.

EXPORTS OF COTTONSEED OIL.

Revised government estimates of exports of cottonseed oil for the month of February, by ports of export, are reported as follows, with totals compared: From New York, 13,239 bbls.; New Orleans, 433 bbls.; Eagle Pass, 2 bbls.; Dakota, 791 bbls.; Michigan, 7,318 bbls.; St. Lawrence, 2 bbls.; other districts, 437 bbls. Total: February, 1917, 22,222 bbls.; February, 1916, 56,547 bbls. Total season 1917 to date, six months, 185,133 bbls.; same period last year, 359,373 bbls.

COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is official Organ of the Interstate Cottonseed Crushers' Association, the Texas Cottonseed Crushers' Association, South Carolina Cottonseed Crushers' Association, the Georgia Cottonseed Crushers' Association, and the Mississippi Cottonseed Crushers' Association.

Crude Oil at Dollar a Gallon—Futures at Higher Than Fifteen Cents a Pound—Consumers Forced in at Extreme Prices—Speculators Help the Sensational Advances—Great Strength in the Lard List—War with Germany Regarded as Bullish on Cotton Oil—New Trading Hours on New York Produce Exchange.

Dollar crude oil has been reported this week. The basis was established within the past few days and represented crude oil for deferred shipment. As a matter of fact, crude oil for prompt shipment was not far from this phenomenal basis. Futures in the New York contract market reached slightly above the fifteen cent level. It was noteworthy that less opposition was given to the advance at the basis of fifteen cents than was observed when prices were a cent a pound lower and crude oil about eight cents a gallon lower.

Some of the large consumers were forced into the market at the great advances. They allowed their stocks to run too low and the reactions that they anticipated never came. When the buying to cover actual needs took place, the amount of oil offering for sale was very limited and well controlled. The principal buying was credited to the compound lard trade which was stimulated at repeated advances by the spectacular upturns in the western lard market.

Much was also heard of some heavy export contracts having been put through, partly for English and North European account. For a time, the trade was skeptical of these advices of export buying inasmuch as frequent claims of this kind have been made in the past without being fulfilled by the clearances as noted from week to week. It was so often repeated, however, that foreign interests had taken large amounts of oil recently that finally the skepticism passed and rumors were that more than 35,000 barrels of cotton oil were sold abroad very recently, necessitating buying in of hedges in the contract market at New York.

The upturn in kindred products of cotton oil, such as tallow, corn oil, soya and peanut, also in the foreign oils, were emphasized but hardly changed the relative position of these various oils. Cotton oil advanced quicker than competing stuffs, but compound lard prices were simultaneously lifted so that this great absorbing channel for cotton oil was kept open.

The war moves against Germany further fired the bullish sentiment. It was realized that products involving the use of cotton oil would be needed for our army and navy. It was also understood that greater credits will be granted to the Allies, which will enable them to buy more in our country, and, further, the exports of all products might be expedited because of the operations against submarines

through workings of the American Navy. On the other hand, there is a Bureau being formed at Washington for the purpose of combating undue inflation of foodstuff prices in the United States, to conduct economical buying and to thwart speculation. The workings of this Bureau will naturally have effect in all markets.

As a general rule, the speculation in cotton oil recently has not been of a tremendous sort. At times the market was very active and frequently only moderately active. Western and local houses led in the speculative support rather than southern or other interests. The big fluctuations are quite natural, as the market will certainly be more sensitive at the present level than when prices were a few hundred points lower. Likewise, there is more room for violent fluctuations with crude at near the basis of a dollar a gallon and futures at about fifteen cents.

The members of the cotton oil trade of the New York Produce Exchange have decided to change trading hours and the new program will be effective very soon, perhaps soon after the amendments of the changed rules are posted on the Exchange for the required ten days. It is proposed to start trading at 10:45 a. m. and continue without recess until 2:45 p. m., while the session on Saturdays will probably be from 10:45 a. m. until close to noon.

Closing prices, Saturday, March 31, 1917.—Spot, \$14; April, \$14.14@14.30; May, \$14.40@14.44; June, \$14.30@14.40; July, \$14.36@14.37; August, \$14.35@14.36; September,

The
American
Cotton
Oil Co.



27 BEAVER STREET
NEW YORK CITY

Cable Address:
"AMCOTOIL," New York

Cottonseed
Products

OIL, LINTERS
CAKE, ASHES
MEAL, HULLS

GOLD MEDALS
AWARDED

Chicago, 1893.
San Francisco, 1894.
Atlanta, 1895.
Paris, 1900. Buffalo, 1901.
Charleston, S. C., 1902.
St. Louis, 1904.

\$14.34@14.35; October, \$13.70@13.71; November, \$13.20@13.40. P. Crude, S. E., \$12.67 sales. Sales were April, 200, \$14.25@14.15; May, 2,000, \$14.46@14.35; July, 8,700, \$14.45@14.28; August, 4,700, \$14.40@14.30; September, 1,800, \$14.38@14.35; October, 1,000, \$13.70@13.67; November, 100, \$13.25. Total sales, 18,500 bbls.

Closing prices, Monday, April 2, 1917.—Spot, \$14.30; April, \$14.30@14.45; May, \$14.59@14.60; June, \$14.53@14.58; July, \$14.56@14.58; August, \$14.53@14.54; September, \$14.54@14.56; October, \$13.85@13.86; November, \$13.35@13.36. Sales were: P. Crude, S. E., \$12.67. May, 7,500, \$14.65@14.54; June, 500, \$14.50; July, 12,000, \$14.60@14.48; August, 4,900, \$14.57@14.50; September, 2,900, \$14.57@14.50; October, 3,400, \$13.90@13.76; November, 800, \$13.37@13.31. Total sales, 32,000 bbls.

Closing prices, Tuesday, April 3, 1917.—Spot, \$14.65; April, \$14.68@14.90; May, \$14.91@14.92; June, \$14.84@14.92; July, \$14.89@14.90; August, \$14.86@14.87; September, \$14.85@14.87; October, \$14.14@14.18; November, \$13.60@13.75. Sales were: P. Crude, S. E., \$12.67@13.33. April, 200, \$14.60; May, 12,500, \$14.93@14.70; June, 1,000, \$14.77@14.78; July, 18,500, \$14.91@14.72; August, 6,000, \$14.85@14.73; September, 7,900, \$14.86@14.73; October, 5,300, \$14.10@13.97; November, 600, \$13.63@13.50. Total sales, 52,000 bbls.

Closing prices, Wednesday, April 4, 1917.—Spot, \$14.75; April, \$14.75@15.05; May, \$14.98@14.99; June, \$14.93@14.96; July, \$14.96@14.97; August, \$14.94@14.95; September, \$14.91@14.92; October, \$14.28@14.31; November, \$13.69@13.71. Sales were: P. Crude, S. E., \$13.33 sales. May, 12,200, \$15@14.90; June, 2,100, \$14.99@14.94; July, 20,400, \$15.01@14.90; August, 6,200, \$14.99@14.87; September, 8,500, \$14.96@14.85; October, 2,400, \$14.31@13.25; November, 2,400, \$13.73@13.58. Total sales, 53,800 bbls.

Closing prices, Thursday, April 5, 1917.—Spot, \$15; April, \$15@15.10; May, \$15.18@15.20; June, \$15.19@15.21; July, \$15.18@15.19; August, \$15.12@15.13; September, \$15.11@15.12; October, \$14.55@14.56; November, \$14.06@14.08. Sales were: P. Crude, S. E., \$13.33. May, 11,300, \$15.20@15.05; June, 1,100, \$15.21@15.20; July, 19,000, \$15.23@15.05; August, 11,900, \$15.15@15.03; September, 11,900, \$15.12@15.00; October, 700, \$14.55@14.42; November, 1,900, \$14.07@13.85. Total sales, 57,900 bbls.

SEE PAGE 29 FOR LATER MARKETS.

FOREIGN COMMERCIAL EXCHANGE.

New York, April 5.—Foreign commercial exchange rates, as far as quoted, are:

London—	
Bankers' 60 days.....	4.71½
Cable transfers	4.76½
Demand sterling	4.75½
Commercial bills, sight	4.75½
Commercial, 60 days.....	4.71½
Commercial, 90 days.....	4.69¼
Paris—	
Commercial, 90 days.....	No quotations.
Commercial, 60 days.....	5.79
Commercial, sight	5.74
Bankers' cables	5.72¼
Bankers' checks	5.73
Berlin—	
Commercial, sight	No quotations.
Bankers' sight	No quotations.
Bankers' cables	No quotations.
Antwerp—	
Commercial, 60 days.....	No quotations.
Bankers' sight	No quotations.
Bankers' cables	No quotations.
Amsterdam—	
Commercial, sight	40¼
Commercial, 60 days.....	40½
Bankers' sight	40½
Copenhagen—	
Checks	29.90

ALABAMA CRUSHERS TO MEET.

The Alabama Cotton Seed Crushers' Association, one of the real live State organizations of the trade, will hold its annual convention on June 6 and 7. The place of meeting has not yet been decided. Several points are striving for the honor.

THE PICARD-LAW COMPANY

Expert Cotton Seed Products Chemists

Magnificently-equipped laboratories covering 5,500 square feet of floor space.
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LATE PLANTING AS THE BOLL WEEVIL REMEDY

What Facts and Figures Show in This Connection

By J. W. Vogler, Atlanta, Ga.

[EDITOR'S NOTE.—This is the fourth of a series of articles by Mr. Vogler, the champion of late planting of cotton as a boll weevil remedy. The first three articles appeared in recent issues of The National Provisioner.]

Before I succeeded in converting Dr. Seaman A. Knapp to my theory of "uniformity and universally late planting," the Department of Agriculture of the United States replied to my efforts to bring about late planting in the American Agriculturist of June 12, 1909, under the head of "Starve the Boll Weevil! Never!" in part as follows:

"Two men are very persistent that we should discard all the evidence obtained by experts for the past 14 years and all the experience of thousands of practical farmers and adopt their suggestions, namely, to starve the boll weevil by late planting."

"It (the Department of Agriculture) feels a little aggrieved, when such good friends intimate that the Department is narrow and wilfully stubborn, because it will not cast aside its mass of testimony and experience and adopt their conclusions, based frequently on very inadequate evidence and sometimes no evidence at all."

"Prove your theory, plan or method and we will advocate it."

No man connected with the Department of Agriculture dared oppose this teaching of early planting, inaugurated by the Bureau of Entomology, until Dr. Seaman A. Knapp became thoroughly convinced of its ruinous effect on the cotton industry. He discarded "all the evidence obtained by experts for the past 14 years and all the experience of thousands of practical farmers." He admitted that the Department had been "narrow and wilfully stubborn," cast aside its "mass of testimony and experience," and adopted my conclusions, which I first submitted to him on July 15, 1905, while he was stationed at Houston, Tex., and changed his teaching of early planting into that of "late planting," as follows:

"If universally the planting could be a little

later, then many of the early emerging boll weevils would die for lack of food. If these directions are followed, more cotton will be made under boll weevil conditions than is now produced, and the boll weevil problem would be practically solved."

The Evidence in the Case.

What better testimony could anybody desire than that furnished by an honest man, who took it for granted that early planting was the proper method to follow to produce cotton under boll weevil conditions because so-called scientists inaugurated and defended it for nearly 15 years, until he became convinced of his mistake? What higher authority will be necessary to prove that "uniformly and universally late" and not "early planting" is the proper procedure to follow in combating the boll weevil, than that of Dr. S. A. Knapp, corroborated by such men as J. A. Evans, H. E. Savely, O. F. Cook and B. T. Galloway of the United States Department of Agriculture, and R. F. Kolb and J. C. Cheney of the Department of Agriculture and Industries of Alabama?

How much longer will intelligent business men of the South let a few so-called experts prostitute the science of entomology to such an extent as to make you believe that unless you plant early, which is bound to produce by their own testimony the greatest number of boll weevils, you cannot produce any cotton at all? Is it not enough that the South has so far been defrauded out of nearly two billion of dollars in cotton alone by their so unscientific advice to plant early to get ahead of the boll weevil?

Is it not about time that the early planting which has cost every inhabitant, man, woman and child, living in the boll weevil infested States \$113 per head, be stopped and the originators of it be properly rewarded and retired from the service of the United States Department of Agriculture?

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White Clover Cooking Oil
Marigold Cooking Oil
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Will be pleased to quote prices on all grades of Refined Cotton Seed in barrels or loose in buyers or sellers tank cars, f. o. b. refinery or delivered anywhere in this country or Europe.

Believes Late Planting Theory Will Win Out.

I am so positive that the United States Department of Agriculture will have to adopt my theory of late planting in course of time, that I really do not care much whether or not you deign to give me your assistance. I have fought early planting single-handed for now over eleven years, and propose to continue fighting it until I have the Bureau of Entomology converted to my theory as definitely as I have succeeded in converting Dr. Knapp and others in the past.

My theory of "uniformly and universally late planting" is undoubtedly considered by some of my friends as a case of the most persistent hard-headedness on record. As my explanation for it, I beg to quote Prof. Chas. F. Thwing of the Western University of Cleveland, and give his definition of the hard-headedness my late planting theory stands for. He says:

"It is cold reasoning. It is incarnate logic. It is solid common sense. It is sound judgment. It is mathematics. It stands for intellectual addition, subtraction, multiplication and division, even for the greatest common divisor, and least common multiple. Its laws—and it has laws—are like the laws of physics, exact.

"Its processes are lengthy and inevitable. Its judgments are or seem to be the interpretations and applications of supreme justice. Its theories are the inductions and condensations of unnumbered experiences, absolute and inevitable. Its conclusions are and must be right; and the application of its theories are as unerring and unescapable as the laws of gravitation."

Every sentence of this description characterizes "late planting" as well as it characterizes "hard-headedness." Late planting, like hard-headedness, is a fact and not a theory.

Uniformly and universally late planting, for instance, cannot produce to September 15 over 283,824 boll weevils, while early planting cannot produce to the same date less than 107,000,000 boll weevils.

It is mathematics that govern the boll weevil, just as much as intellectual addition, subtraction, multiplication and division govern the production of cotton, based on the time of planting. Its laws—and it has laws—are like the laws of physics, exact and unchangeable.

The laws of nature govern the production of squares, weevils and cotton. The temperature regulates the production of squares as unerringly as the production of squares regulates the number of weevils. The number of weevils kept alive is again governed by the

21st Annual Meeting

of the

**Inter State Cotton Seed
Crushers' Association**

will be held at

DALLAS, TEXAS**May 14, 15, 16, 1917****ARE YOU GOING?**

time cotton produces squares as unerringly as the final production of weevils regulates the final production of cotton.

All of it, taken together, is a science, dictated by common sense, which seems to be as foreign to some of our experts as late planting itself, which is the only correct method to follow in order to produce cotton under boll weevil conditions.

Effect of Rainfall on the Cotton Crop.

In my endeavor to arrive at a conclusion in regard to the time cotton should be planted in order to avoid boll weevil damage, I have also incidentally made some very positive observations in regard to the effect of rainfall on the cotton crop under boll weevil conditions. I find that rainfall governs the cotton crop under boll weevil conditions only if it is excessive in May and June. Rainfall in March and April is helpful because it retards the planting and therefore reduces the production of early squares.

Out of every ten crop failures that are attributed to rainfall, only one is due to that cause, and the other nine can be positively traced to early planting. As a consequence, I have come to the conclusion that excessive rainfall is not a factor to reduce the cotton crop under boll weevil conditions, unless cotton is planted too early or the rainfall is excessive in May and June.

I have always contended that the time when cotton under boll weevil conditions is planted, with the proper consideration of subsequent weather conditions, will enable you to estimate a season's crop much better than by estimating it in accordance with the acreage planted to cotton, as in the past, and am now ready to prove it.

In order to accomplish the desired end I selected, at random, Caddo, Rapide and East Baton Rouge Parishes in Louisiana as my object lessons and proofs.

Before going into the details of it I would like for you to bear in mind, however, that squares cannot be produced early on cotton; although planted early, if the weather during March and April is so cold that cotton cannot grow. As a consequence, a cold March and April produces late squares, especially if May is also unfavorable to the growth of cotton. Also please bear in mind that early planting, in accordance with the teaching of the United States Department of Agriculture, has been followed in every one of the following instances:

Year.	Lowest temperature.			Production of cotton.
	Mar.	Apr.	May.	
East Baton Rouge Parish (31st deg. of lat.):				
1910	38	42	59	846 bales
1914	30	39	55	3,692 "
Rapides Parish (32d deg. of lat.):				
1911	37	47	49	9,509 "
1914	29	37	51	11,914 "
Caddo Parish (33d deg. of lat.):				
1911	33	44	47	35,981 "
1913	29	39	54	45,279 "

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Instead of these three instances I am satisfied I could easily furnish thousands, provided I had an opportunity to obtain the temperature and the rainfall in that many cases as easily as I can obtain the number of bales of cotton produced, and if I had the time necessary to work them out.

The Logic of the Facts Is Very Plain.

It will be observed that late squares are equally as beneficial in the three latitudes, and that in every instance the better crop is due to the lower temperature in either March, April and May, or to the temperature in the three months combined.

The lower the temperature the later were also the squares produced, and the later the squares were produced the fewer were also the number of weevils kept alive. As a natural consequence the smaller the number of weevils kept alive the smaller had also to be their progeny, and in the same propor-

tion as the progeny of the weevils was smaller the greater is also bound to be the amount of cotton produced.

I am absolutely at a loss to understand how anybody, with good common sense, can either fail to grasp the fundamental principles of late planting or undertake to argue against it, unless it be an expert who has either no common sense at all, or who has no regard for the welfare of the cotton industry or the South.

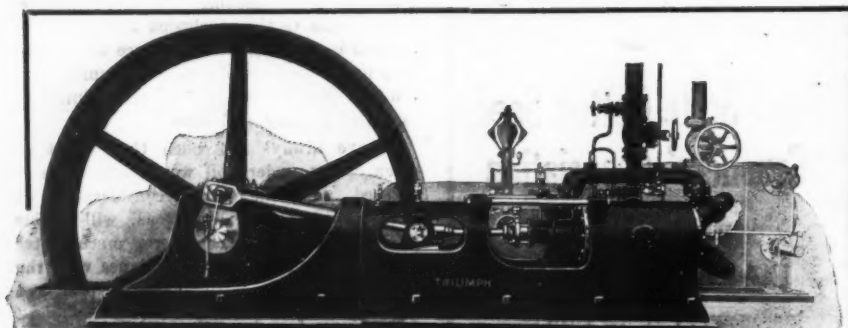
I would delight in furnishing the thousand additional proofs with the proper consideration of temperature, rainfall and acreage planted to cotton in each instance, to convince everybody interested in the cotton industry that the time when cotton is planted in connection with subsequent weather conditions is by far a more important factor in estimating a cotton crop nowadays than by the antiquated way of estimating it in ac-

cordance with the acreage. This was all right before the boll weevil era, but is absolutely out of date since the arrival of it, and will be only misleading as long as early planting is permitted to be taught and practised.

If I have failed to prove that my theory of "late planting" is the only proper procedure to follow in order to produce the most cotton under boll weevil conditions, is it not a fact that Dr. Seaman A. Knapp, Dr. B. T. Galloway and others have proved its correctness and advisability? Can you advance a reason why, in the face of the proof so furnished, "early planting" should not be stopped at once and "late planting" substituted, as was promised by the Department of Agriculture in 1909?

J. W. VOGLER.

Atlanta, Ga., March 25, 1917.



TRIUMPH

THE NOISELESS COMPRESSOR

Everybody knows that noiseless machinery is one of the truest indications of efficient, high-grade equipment.

Engineers and economists are agreed that noise and vibration are absolute wastes, and that wherever these exist excess friction will also be found. Then why contend with a noisy ammonia compressor?

The TRIUMPH Horizontal Double-Acting Ammonia Compressor is the highest example of Twentieth Century silent machine construction and is backed by years of experience and active research.

BULLETIN 501



"True in the Long Run"

The Triumph Ice Machine Co.

Cincinnati, Ohio, U. S. A.

Why Not Use the Best

You have often observed that those materials which constantly grow in use and favor are those which show a special fitness in the work for which they are recommended.

The remarkable success of

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is due to one cause and to one cause only—Results. Where it is used staleness and sourness give way to freshness and purity, and dirt, grime and grease give way to a cleanliness that is positively sanitary.

In addition you know, too, that Wyandotte Sanitary Cleaner and Cleanser means economy in work, in time, and in cost. These claims for Wyandotte Sanitary Cleaner

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THE J. B. FORD CO.

Sole Manufacturers

Wyandotte

Mich.

This Cleaner has been awarded the highest prize wherever exhibited

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THE WEEK'S CLOSING MARKETS

[Friday Was a Holiday on All Markets.]

THURSDAY'S GENERAL MARKETS.

Lard in New York.

New York, April 5.—Market firm; prime Western, \$21.40@21.50; Middle West, \$21.30@21.40; city steam, 21½¢ nominal; refined Continent, \$22.40; South American, \$22.60; Brazil, kegs, \$23.60; compound, 16½¢@16¾¢, all nominal.

Marseilles Oils.

Marseilles, April 5.—Copra fabrique, 206 fr.; copra edible, — fr.; peanut fabrique, 203½ fr.; peanut edible, — fr.

Liverpool Produce Market.

Liverpool, April 5.—(By Cable.)—Beef, extra India mess not quoted; pork, prime mess not quoted; shoulders, square, 113s.; New York, 107s. 6d.; picnic, 91s.; hams, long, 125s.; American cut, 128s.; bacon, Cumberland cut, 127s. 6d.; long clear, 131s.; short back, 127s.; bellies, 131s. Lard, spot prime, 130s.; American, refined, 28-lb. box, 134s.; May, 131s. Lard (Hamburg), nom. Tallow, prime city, not quoted; New York City specials, not quoted. Cheese, Canadian finest white, new, 164s. Tallow, Austrian (at London), 58s. 6d.

THURSDAY'S CLOSINGS.

Provisions.

The market was very strong at the close with final prices at new high levels.

Tallow.

The market was very firm, with rumors of sales at ½¢ advance. Special loose is quoted at 13½¢.

Oleo Stearine.

The market was very firm with light offerings. Oleo is quoted at 16½¢.

Cottonseed Oil.

The market was excited and very strong late with reports of crude at \$1.

THURSDAY'S LIVESTOCK MARKETS.

Chicago, April 5.—Hogs strong, 15c. higher. Bulk of prices, \$15.20@15.55; light, \$14.50@15.50; mixed, \$14.90@15.65; heavy, \$14.80@15.65; rough heavy, \$14.80@15; Yorkers, \$15.15@15.35; pigs, \$10.60@14.25; cattle strong; heaves, \$9.25@13.15; cows and heifers, \$5.65@10.90; Western, \$9.10@11.25. Calves, \$9.25@13.75; sheep, steady; lambs, \$11.75@14.50; Western, \$10.50@12.85; native, \$10.40@12.60; yearlings, \$11.50@14.

Omaha, April 5.—Hogs higher, at \$14.85@15.40.

Buffalo, April 5.—Hogs higher; on sale at \$15.50@15.85.

Kansas City, April 5.—Hogs higher, at \$14.55@15.60.

St. Joseph, April 5.—Hogs strong, at \$14.90@15.50.

Sioux City, April 5.—Hogs higher, at \$14.60@15.15.

Louisville, April 5.—Hogs higher, at \$13.85@15.40.

St. Louis, April 5.—Hogs higher, at \$15.25@15.75.

Indianapolis, April 5.—Hogs higher, at \$15.45@15.65.

OCEAN FREIGHTS.

[Subject to change. Quotations given are shillings per ton and cents per 100 lbs.]

	Liver- pool.	Glas- gow.	Rotter- dam.	Copen- hagen.
Beef, tierces	\$4.00	\$4.00	500c.	300c.
Pork, barrels	4.00	4.00	500c.	300c.
Bacon	4.00	4.00	500c.	300c.
Canned meats	4.00	4.00	500c.	300c.
Lard, tierces	4.00	4.00	500c.	300c.
Tallow	4.00	4.00	500c.	300c.
Cottonseed oil	4.00	4.00	500c.	300c.
Oil Cake	4.00	4.00	500c.	200c.
Butter	4.00	4.00	500c.	400c.

No rates to Hamburg.

PACKERS' PURCHASES

Purchasers of livestock by packers at principal centers for the week ending Saturday, March 31, 1917, are reported as follows:

Chicago.	Cattle.	Hogs.	Sheep.
Armour & Co.	8,331	25,800	22,237
Swift & Co.	6,168	14,000	25,199
Wilson & Co.	4,988	10,000	8,720
Morris & Co.	5,859	7,200	8,744
G. H. Hammond Co.	2,199	7,300	...
Anglo-Amer. Provision Co.	414	5,900	...
Libby, McNeill & Libby	1,026	...	...

Roberts & Oake, 3,800 hogs; Boyd, Lunham & Co., 5,400 hogs; Western Packing & Provision Co., 5,900 hogs; Independent Packing Co., 4,700 hogs; Miller & Hart, 3,400 hogs; Brennan Packing Co., 5,700 hogs; others, 15,900 hogs.

Kansas City.	Cattle.	Hogs.	Sheep.
Armour & Co.	4,016	8,930	5,174
Fowler Packing Co.	656	...	2,725
Wilson & Co.	3,555	6,915	4,384
Swift & Co.	4,600	6,249	7,306
Cudahy Packing Co.	3,477	4,662	5,459
Morris & Co.	4,070	6,810	3,984
Others	303	1,841	54

Blount, 262 cattle and 1,456 hogs; Independent Packing Co., 169 cattle; Wolf Packing Co., 83 cattle; Rice & Kirk, 9 cattle and 3,124 hogs; United Dressed Beef Co., 21 cattle; John Morrell & Co., 107 cattle; Schwartz, Bolen & Co., 2,723 hogs; United Dressed Beef Co., 21 cattle.

Omaha.	Cattle.	Hogs.	Sheep.
Morris & Co.	3,463	10,358	5,773
Swift & Co.	6,633	14,305	12,732
Cudahy Packing Co.	5,625	13,813	12,407
Armour & Co.	5,404	16,626	10,366
Swartz & Co.	...	4,963	...
J. W. Murphy	...	21,123	...

Lincoln Packing Co., 196 cattle; John Morrell & Co., 36 cattle; Kohrs Packing Co., 309 hogs; South Omaha Packing Co., 56 cattle.

St. Louis.	Cattle.	Hogs.	Sheep.
Morris & Co.	3,081	5,088	1,158
Swift & Co.	2,700	4,121	1,601
Armour & Co.	2,827	6,596	1,201
East Side Packing Co.	197	1,468	...
St. Louis Dressed Beef Co.	873	...	...
Independent Packing Co.	904	308	...
Sartorius Provision Co.	...	342	...
Carondelet Packing Co.	19	446	...
Hell Packing Co.	8	854	...
American Packing Co.	2	869	...
Krey Packing Co.	3	...	...
Others	270	18,199	220

SLAUGHTER REPORTS

Special reports to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending March 31, 1917:

CATTLE.	
Chicago	34,901
Kansas City	20,457
Omaha	22,065
East St. Louis	10,978
St. Joseph	8,586
Cudahy	680
Sioux City	3,292
Fort Worth	8,592
New York and Jersey City	8,547
Philadelphia	3,538
Denver	2,109
Oklahoma City	4,739

HOGS.	
Chicago	123,953
Kansas City	41,199
Omaha	56,573
East St. Louis	38,391
St. Joseph	37,588
Cudahy	4,159
Sioux City	27,180
Cedar Rapids	7,833
Ottumwa	5,821
Fort Worth	23,953
New York and Jersey City	20,558
Philadelphia	4,959
Denver	11,721
Oklahoma City	15,379

SHEEP.	
Chicago	63,115
Kansas City	29,205
Omaha	37,024
East St. Louis	4,230
St. Joseph	21,271
Cudahy	22
Sioux City	7,957
Fort Worth	2,155
New York and Jersey City	16,834
Philadelphia	5,478
Denver	10,445
Oklahoma City	117

Are you in need of a competent employee in some branch of your business? You can get him by using the "Wanted" column on page 48.

RECEIPTS AT CENTERS

SATURDAY, MARCH 31, 1917.

	Cattle.	Hogs.	Sheep.
Chicago	400	13,000	3,000
Kansas City	1,000	500	500
Omaha	200	10,000	500
St. Louis	300	5,000	...
St. Joseph	100	3,000	...
Sioux City	500	6,000	200
St. Paul	170	450	...
Oklahoma City	300	1,800	...
Fort Worth	2,000	2,000	...
Milwaukee	50	503	...
Denver	300	400	50
Louisville	500	1,000	50
Cudahy	...	200	...
Wichita	...	354	...
Indianapolis	250	3,000	60
Pittsburgh	...	1,300	500
Cincinnati	400	2,200	100
Buffalo	75	350	3,000
Cleveland	100	2,000	20
New York	379	...	674
Toronto, Canada	220	1,630	10

MONDAY, APRIL 2, 1917.

Chicago	16,000	52,000	18,000
Kansas City	19,000	11,000	12,000
Omaha	5,500	8,000	8,000
St. Louis	3,200	11,000	900
St. Joseph	2,700	8,000	7,000
Sioux City	4,500	6,000	300
St. Paul	3,300	7,000	50
Oklahoma City	1,300	3,000	...
Fort Worth	10,000	5,000	2,500
Milwaukee	50	...	...
Denver	2,300	1,200	1,700
Louisville	1,500	3,300	50
Detroit	...	1,270	...
Cudahy	...	500	...
Wichita	...	253	...
Indianapolis	1,400	5,000	...
Pittsburgh	1,900	5,500	2,500
Cincinnati	2,200	4,226	...
Buffalo	2,500	9,000	8,800
Cleveland	7,000	6,000	600
New York	3,260	6,328	5,470
Toronto, Canada	1,997	1,316	13

TUESDAY, APRIL 3, 1917.

Chicago	4,000	19,000	16,000
Kansas City	12,000	15,000	10,000
Omaha	5,500	11,000	7,000
St. Louis	4,100	11,000	1,200
St. Joseph	2,300	8,000	4,000
Sioux City	500	8,000	1,000
St. Paul	2,300	4,000	25
Oklahoma City	2,000	3,300	150
Fort Worth	3,500	3,000	...
Milwaukee	600	3,000	100
Denver	1,000	3,300	4,200
Louisville	500	1,054	50
Detroit	...	1,550	...
Cudahy	...	2,000	...
Wichita	...	5,945	...
Indianapolis	1,200	5,000	200
Pittsburgh	...	2,000	300
Cincinnati	500	2,238	100
Buffalo	300	5,000	1,800
Cleveland	500	1,000	...
New York	817	1,384	454
Toronto, Canada	428	705	21

WEDNESDAY, APRIL 4, 1917.

Chicago	12,000	21,000	19,000
Kansas City	5,000	8,000	3,500
Omaha	...	10,000	...
St. Louis	3,300	10,000	8,000
St. Joseph	...	4,000	...
St. Paul	...	3,000	...
Milwaukee	...	6,633	...
Louisville	...	1,400	...
Detroit	...	3,000	...
Cudahy	...	500	...
Wichita	...	1,462	...
Pittsburgh	...	6,000	...
Cincinnati	800	2,903	...
Buffalo	500	4,400	2,400
Cleveland	...	1,000	...
New York	2,260	4,950	1,430

THURSDAY, APRIL 5, 1917.

Chicago	3,500	13,000	5,000
Kansas City	1,500	5,000	7,000
Omaha	3,000	6,000	2,500
St. Louis	1,800	7,000	1,000
St. Joseph	1,300	7,000	1,000
Sioux City	800	5,000	500
St. Paul	...	5,000	...
Milwaukee	...	1,688	...
Louisville	...	1,100	...
Detroit	...	3,100	...
Cudahy	...	1,000	...
Wichita	...	1,604	...
Indianapolis	...	5,000	...
Cincinnati	600	2,822	...
Buffalo	100	1,600	2,000
Cleveland	...	2,000	...
New York	792	1,750	1,539

FRIDAY, APRIL 6, 1917.

Chicago	1,200	11,000	9,000
Kansas City	900	2,000	3,000
Omaha	2,000	9,000	5,500
St. Louis	500	5,500	500
St. Joseph	200	2,000	1,000
Sioux City	1,000	6,500	...
Fort Worth	2,000	3,500	100
St. Paul	1,000	6,000	...
Oklahoma City	1,000	3,200	...

HIDE AND SKIN MARKETS

(SHOE AND LEATHER REPORTER)

Eighty-seven thousand packer hides changed hands at slightly below holders' former asking prices. More business was refused by other packers because of the lower price.

Chicago

PACKER HIDES.—Movement was extremely limited in the period under review. Tanners were making numerous inquiries for hides in sizable blocks and made bids considered well up, but sellers generally declined to trade except at their views. Packers seem extremely firm and determined to get their prices, claiming that at present hide and leather prices there is from 5 to 10c. a pound in every hide by working into the finished product. Heavy native steers sold at 29c. for 6,000 January slaughter early in the week. It was rumored that a couple more cars brought that price throughout the week, but confirmation could not be obtained. Two packers reported refusing bids at 29½c. involving blocks of January slaughter up to 10,000 in number. December hides, where available, are held at 31c., and January kill is talked at 30c. Heavy Texas steers were quiet. Sellers ask 30@30½c. for the heavy end, while lights are talked at 30c. Nominal market on underweights believed to be nearer 29c. owing to recent sale of branded cows at that figure. Butt branded steers ruled quiet. Available stocks are well in hand. Nominal market considered at 29½@30½c., with the inside believed nearer the actual market. Colorado steers were not moved. These are quoted at 30c. usually asked. Nominal market is believed in a range of 28½@29½c. as to salting, based on recent sales of branded cows at 29c. Branded cows last sold at 29c. One tanning packer booked his unsold stocks to tanning account at that rate this week. Production is small and sellers usually are trying for more money. Heavy cows sold at 29c. for 2,000 October-November take-off. A bid of 29½c. was refused for 10,000 November-December slaughter, and 30c. was firmly demanded. Light cows are quiet. Moderate inquiry reported. Sellers last booked business at 29c., but unsold lots are usually held up to 30c. Production is moderate and available stocks ample. Native bulls were unchanged. One killer is offering first quarter slaughter at 24c.; others ask more money. Buyers evince but little interest. Branded bulls are quiet, due to small supplies. Recent sales were effected at 20¼@20½c. for northern and 22c. for southern points of take-off.

Later.—Market active; 16,000 winter hair natives sold at 29c.; 29,000 all weight Texas sold at 29c.; 8,000 heavy cows sold at 29c.;

34,000 butts and Colorados sold at 28c. Two sellers refuse these prices for winter production.

COUNTRY HIDES.—Trading in country hides was halting. Operators were not willing to anticipate future events, and were willing to wait for actual happenings, especially with reference to the extraordinary session of Congress. What little business was done, was in the nature of filling in broken stocks and for immediate requirements. Heavy steers were not taken as a regular selection. A car of Ohio plump short haired grub free hides sold at 27c. Current goods are held at 25c., and last sales were at 24c. Buyers' views are not over 23c. Available stocks are moderate. Heavy cows sold at the former low rate of 22c. involving a car of current local collections. More are offered at that rate and 23½c. is talked for better hides. Buffs sold at 22½c. for a car of local current stuff. A couple of cars of similar hides from outside points sold at 22c. These rates are considered the nominal market for further business, with most buyers out of the market or else talking such low rates as to be not worth considering. No seconds were moved. The situation in the originating sections is inclined toward easiness where anything is offered. Iowa buffs and heavy cows are offered as low as 21½c. without interesting buyers. Northwestern similar weights are held at 22c. All weight western hides sold at 21c. delivered, and from other sections 21½c. was realized. Extremes were moderately active. This selection continues in good call. Current extremes of local gathering brought 25½c. Another car of similar goods from an outside point brought 25½c., and a car of a little better quality realized 26c. Leather from these hides continues in good call, and tanners are always looking for suitable quality in the extreme weights. Branded cows ruled quiet and waiting. Country run of hides quoted at 21c. flat last paid and nominal. Buyers' views are considerably less. Country packer branded hides are quoted at 23@26c. asked, with the outside price considered high for goods from surrounding sections. Bulls were slow and nominal at 20c. last paid locally. Sellers are trying for more money, but buyers are not lending the market any support. Country packer bulls are quoted at 21c. last paid, and 22@23c. generally asked. Later.—Countries quiet, unchanged. Improvement expected.

CALFSKINS sold at 38½c. for a car of local city skins in connection with a car of similar skins at 39c. Bids at 40c. were refused for first salted local city calfskins and 42½c. demanded. Collectors find receipts below expectations, and they are sold further ahead than they anticipated on account of inaccurately gauging their collections. Outside city calfskins quoted at 38@40c. asked; country run at 35c. bid and 38c. last paid. Packer calfskins, 45c. bid to several sellers, and refused with 50c. firmly demanded. Moderate stocks are held. Deacons quoted at \$2.40@2.60, and light calf at \$2.60@2.80. Inside rates last realized for country run. Kipskins were quiet, due to limited supplies. Country run of skins of current collection is available at 28c.; better skins talked to 30c.; city kipskins sold at 32½c. for a car of current

quality; better skins held at 35c. South American city kipskins sold at 34½c. Packer kipskins quoted firm and scarce at 40c. bid, and 42½@45c. asked as to salting.

Later.—Car city calfskins brought 40c.

HORSEHIDES are quiet. Sellers demand \$9 firmly for country run, and are refusing bids at \$8.50@8.75. Stocks are moderate. City hides, \$9.50@10 nominal; seconds, \$1 reduction; ponies and glues, \$4@4.50, and coltskins at \$1@2 nominal.

HOGSKINS are steady but quiet at \$1.15 @1.40 nominal for country run, with the rejected pigs and glues out at half price. No. 1 pigskin strips sold at 9¼c. with No. 2's in connection at 8¾c. Stocks are large and business would be welcomed. No. 3 strips quoted 5@6½c. nominal.

SHEEP PELTS.—Movement in sheepskins was limited. Available stocks continue of moderate proportions. Buyers are unwilling to pay more money for skins owing to poor position of the pickled sheepskin market. Packer sheep and lambskins of current slaughter sold up to \$4.30, while river skins of good quality topped \$4.25. Heavy sheepskins are quoted at \$5.25@5.50 as to weights. Shearlings range at \$1.60 for the clips to \$2 asked for coatstock goods. Spring lambs are coming now, and as high as \$2 is asked. No business yet put through this year. Angora goatskins quoted at \$3.35@3.50, and common goods at \$1.75@2 paid as to lots. Dry goatskins quoted at \$0.50@1.10. Dry sheepskins quoted at 35@37½c. for business; most Montana lots held at 40c., but believed 37½c. would purchase; best bids are at 36c. Pickled sheepskins quoted at \$14@17 per dozen nominal.

New York

PACKER HIDES.—A little activity was noted in this market recently, after weeks of dullness. One packer sold five cars of October, November and December native steers at 30c., and later on the same dealer sold about 2,400 September to December Jersey City native steers at 29½c. Another packer sold his holdings of, previous to January, spread native steers, amounting to about 3,800 at 31½c. Following these sales the market has again become quiet with both buyers and sellers awaiting further developments. The market for small packer hides continues quiet and unchanged. Holdings are fairly large and some brokers report making several bids for lots with no sales resulting. Buyers and holders continue to keep apart in their views. At outside points small packers are asking 28c. for native cows. Steers are nominally quoted at 29c.

COUNTRY HIDES.—The market continues dull. A few more inquiries were reported this week by brokers. Shippers are holding firm on most lots of good Ohio hides. Occasionally a car is sold at a reduction low enough to meet buyers' ideas. The majority of tanners are out of the market, and are taking no interest in offerings. What bids are made are, so far, below shippers' views, and in most instances no trading is effected. Considerable more offerings were noted this week in this market than for several days past. Ohio and middle west extremes are offered here at 25½@27c. Buffs are quoted around 22½@24c. as to lots, etc. About 1,000 middle west extremes were offered here at 26½c., with no sale resulting. Another lot, consisting of about 1,000 Ohio extremes, are offered at 27c. One lot of far western extremes was offered at 25½c. About 2,000 western Pennsylvania 25 lbs. and up hides sold at 23c. flat. Another car of western buffs sold at 22½c. flat. There are several offerings of middle west and Pennsylvania buffs at prices ranging from 22½@23c. Small lots of New England and New York State all weight hides, consisting of 300 to 400 hides each, have sold at 20½@21½c. Southerns are quiet with offerings freely made. Middle Southerns are quoted at 22@22½c. Some good lots of Northern Southerns free of ticks are offered at 25c. Canadian all weight hides are offered according to lots at 22½@24c.

(Concluded on page 41)

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LIVE STOCK MARKETS

CHICAGO

(Special Letter to The National Provisioner from the National Live Stock Commission, Chicago, April 4.

Cattle receipts are light, 16,358 on Monday being followed by 4,377 on Tuesday and estimated receipts of only 12,500 on Wednesday, at which time the trade ruled wildly higher. All kinds of killing steers sold 25@40c. per cwt. higher, and some kinds showed even more advance; \$13.15 was paid for prime heavy beefs, choice cattle sold largely from \$12.75@13, good to choice kinds \$12.25@12.75, and medium to good kinds, \$11.50@12.25, and there is hardly anything in the steer line worthy of the buyers' attention that is selling under \$10.50. It is true that cattle values are on an abnormally high basis, but where is the relief? High feed cost for many months back has resulted in a logical shortage of marketable cattle. Production has failed to keep pace with our rapidly and ever increasing population. Entrance of the United States into the world war only intensifies a situation so far as the demand for food stuff is concerned that is already taxed to the limit. And, deplorable though it is, and as much as we regret the necessity of Uncle Sam's entrance into international affairs, yet there is no use mincing words, and we must acknowledge the fact that the provisioning of an army of five hundred thousand or a million men will create a still greater demand for foodstuff that is already scarce and on a tremendously high basis.

Another factor to be considered, and one which has had an important bearing on our decision to advise the picking up of the young and growing cattle and carrying them through the summer and into the fall months, is the fact that the Northwest range country experienced one of the worst winters in the history of the trade, and we are informed from creditable sources that the loss in cattle is greater than it has been for many years; in fact, some herds where owners had no hay have been almost wiped out; and thus there is no likelihood of any supply of marketable cattle during the summer and fall months that will be of sufficient volume to bring about a serious or permanent decline in prices, but on the contrary there are many good reasons for confidently predicting that the market has not yet seen its high point.

Never in the history of our country has the demand for all kinds of beef, including the cheaper grades of cow-stuff, been so urgent as it is at present, and, furthermore, unless all signs fail we confidently anticipate an era of abnormally high prices for many months to come. Declines in the trade are short-lived and quickly recovered, and in a general way the trade on cows and heifers is 25@35c. higher, and a new high record has been established, particularly on the medium and low-priced cow-stuff. Canning cows are selling up to \$6.25, cutters up to \$7, only fair beef cows from \$7.25@7.90; good dressed beef cows are selling up to \$8.75, with choice grades up to \$9.75, and good to choice heavy cows and heifers are selling all the way from \$10@11 per cwt. In the heifer line prices are also outrageously high. Common to medium little killing heifers are selling from \$6.50@7.25, medium to good light butcher heifers \$7.25@8.25, good yearling heifers up to \$9.50, with prime kinds up to \$11 and good to choice yearling steers and heifers mixed

are selling all the way from \$10.50@11.50. These war-time prices have resulted in a decided broadening in the demand for feeding cows and heifers and good to choice quality feeding cows are selling from \$7@7.50, fair kinds on the cutter order from \$6.50@7, good to choice feeding heifers \$7.50@8, and medium to good grades from \$7@7.50. Bulls are at such a dizzy altitude that a little slowing up in the trade is not surprising when you think that choice export and butcher bulls are selling from \$9@10, fair to good butcher bulls \$8.50@9, heavy bolognas \$8@8.50, medium to good kinds \$7.65@8, fair to medium light bulls \$7@7.50, and common little canning bulls \$6@6.75. The calf trade has improved a little, and the bulk of the good to choice veal calves are selling from \$13@13.75, with good to choice medium weight calves all the way from \$9@12 per cwt.

Monday's run of 49,169 hogs enabled the buying contingent to force a temporary decline of 15@25c. in the market on Monday and Tuesday of this week, at which time a feeling prevailed that we were likely to get a fairly liberal run for a few days, as this is a time of the year when most farmers are anxious to "clear the decks" in order to get to work in the fields. However, Wednesday's meager run of 21,000 dispelled any allusion

(Continued on page 41.)

KANSAS CITY

(Special Letter to The National Provisioner.)

Kansas City Stock Yards, April 3.

Cattle receipts were 12,000 today, and 19,000 head yesterday, very liberal for this season, but prices were largely steady today, following a market steady to 15c lower yesterday, best steers around \$12. Hog receipts today were 15,000, market weak to 5c lower at the opening, but this was switched to a 5c higher market early in the session; top \$15.35. Sheep and lambs today 9,000, market slow, and bids lower, salesmen holding out for steady prices.

In beef cattle there was nothing strictly prime offered, though numerous droves of good fed cattle sold at \$11.50@11.90, bulk of the natives \$10@11, more cattle below \$10 this week than heretofore, down to \$9. Pulp steers are getting better finished each week, and a load brought \$11.90 today, highest price ever paid here for that class of cattle, though \$11.85 was paid last week, and other steers sold today at \$11.80, still others at \$10.60@11.35. There has been a surprising amount of beef here this week in view of feed conditions. Cows range mostly from \$8@8.25, a few choice ones up to \$10.50, heifers mostly \$9@10.25, a few up to \$11, veal calves up to \$13.

Hog markets almost invariably turn out better than indications in the early rounds. Order buyers were out early, and though packers hung back and simulated indifference, the packers paid the highest price of the day for the hogs they got, top finally stopping at \$15.35, bulk of sales \$14.75@15.30, light weights up to \$15.05. Pigs bring good prices, \$12@14. From a survey of the character of the hogs coming, dealers here say that many fall pigs are being put forward because of the high prices realized, and also as a result of feed shortage, and that the May and June supply will be deficient. With an increasing outlet for lard by way of Canada, and a deficiency of lard producing hogs, lard will advance in price, and heavy hogs will meet a good outlet.

A good many tail end lambs are included in receipts, as some feed lots are being cleaned up, and top lambs this week stop around \$14.75, middle grades \$14.50, prime ewes worth \$12.50, but few coming good enough to get above \$11.50. Feeding lambs sell at \$13.50@

13.95 this week. The Texas run will be light this year, a few goats coming now at \$6.50@8.75, kids \$10.50.

OMAHA

(Special Letter to The National Provisioner.)

South Omaha, Neb., April 3.

A very heavy run of cattle here last week resulted in a break of anyway 25 cents on all grades of fat cattle, and all steers except the very best were a quarter to forty cents off. Prime heavy beefs alone failed to show the break. This week on lighter receipts the market has reacted, and a good share of the slump has been made up. Today medium to good beefs are selling 15@25c. above last Friday, while best beefs are at least 10@15c. up. Today a new record of \$12.60 was hung up. Most of the well finished long term steers are bringing \$12 and better, while \$10.50@11.50 is catching most of the fair to good grades, with common to fair kinds on down. Cows and mixed stock have moved up about as fast as steers this week, and good to choice cows and heifers are being quoted at \$8.75@10.25, while there is a persistent feeling in the trade that prime heifers are worth even more. Fair to good cows are bringing \$8@8.75, and canners are selling at \$5.50@7.50. Veal calves are about where they were last week at \$9@12, and bulls are also bringing good firm prices.

Hogs reached the highest levels in history on last week's close, when the bulk brought \$14.65@15, and tops sold as high as \$15.05. Monday prices reacted a dime, and as the quality was the poorest in a long time an even greater decline was shown on paper, the bulk selling at \$14.50@14.90, and tops at \$14.95. There was no quotable change today, though other markets were easier, and provisions showed small depreciations. Quality was some better today, but it looks as though good hogs were going to be scarcer from now on than they have been the past month or so. Bulk today sold at \$14.60@14.85, the improvement over yesterday's figures being due to difference in quality. Discrimination against the plainer lights and highly mixed kinds of late has widened the price spread, but as wide ranges are common in the spring this is only seasonable.

Slow markets have been a feature of the lamb trade for the past two weeks. They have been due to the efforts packers have been making to get costs down, but moderate receipts have been responsible for good firm markets most of the time. On the close of last week lambs were as high as any time, and sheep and shearing stock reached new high levels. This week packers have enforced small depreciations on the plea of a slack Holy Week demand for dressed meats. Today best light lambs sold about steady, but 15@25c declines were noted on other grades. The best light and handy lambs are selling at \$14.60@15.10, with weighty kinds on down to \$14. Shorn lambs are bringing \$11.50@12.25. Old sheep are in good demand, and so far this week have held steady at last week's advance. Most of the decent to good Western ewes are selling at \$11.25@12 with Mexicans on up to \$12.25. Mexican wethers are selling as high as \$12.75 and \$13.75 is quotable on best Mexican yearlings. There is a persistent feeling in the trade that the high levels have not yet been reached in either sheep and lambs. It looks as though supplies from now on were bound to be moderate, and the present slackness in the demand is thought to be more or less artificial, and only temporary at that.

NEW YORK LIVE STOCK

WEEKLY RECEIPTS TO APRIL 2, 1917.

	Beefers.	Calves.	Lambs.	Hogs.
New York	1,411	4,571	1,393	4,983
Jersey City	4,378	5,690	6,595	15,575
Central Union	2,758	1,192	8,846	...
Totals	8,547	11,453	16,834	20,558
Totals last week	10,440	5,512	15,960	16,427

ICE AND REFRIGERATION

NEW CORPORATIONS.

Joplin, Mo.—The Southwestern Creamery Company has been incorporated with a capital stock of \$7,500 by J. W. McAllister, W. B. Fox and I. Sanford.

North Harpersfield, Delaware Co., N. Y.—The Middlebrook Dairy Company, Inc., has been incorporated with a capital stock of \$10,000 by M. P. Nichols, W. H. Laidley and G. L. Vroman.

Healdton, Okla.—C. V. Miller, N. A. Hennings of Healdton and R. E. Martin of Wirt, Okla., have incorporated the Healdton Ice, Light, Power & Supply Company. Capital stock, \$15,000.

Fulton, Schoharie Co., N. Y.—The Walhalla Farms Co., Inc., to deal in dairy products, etc., has been incorporated with a capital stock of \$30,000 by J. L. Baker, F. Freemyer, M. E. Freemyer of Middleburg, N. Y.

Utica, N. Y.—The Genesee Fruit & Oyster Company, to carry on an oyster, fish, fruit business, etc., has been incorporated with a capital stock of \$3,000 by Anthony J. Kieffer, Alonzo M. Kieffer and Elbert D. Fox.

New York, N. Y.—Ice Rink Construction Co., Inc., to manufacture ice, ice products, etc., has been incorporated with a capital stock of \$50,000 by B. Waldman, J. Gensler, H. Goldstein, 37 Liberty street, New York, N. Y.

New York, N. Y.—James C. Punderford, Stewart Haddock and Walter J. Francis have incorporated the Punderford, Haddock & Francis Corporation, to manufacture butter, cheese, and milk products. Capital stock, \$100,000.

New York, N. Y.—The Hodupp-Poole Co., Inc., to deal in butter, foodstuffs, etc., has been incorporated with a capital stock of \$75,000 by J. J. Hodupp, 2 Claremont avenue; C. L. Poole, 52 Tonnele street, Jersey City, N. J.; H. B. Hole, Versailles, Ohio.

ICE NOTES.

Drumright, Okla.—A cold storage plant will be installed by the McRay Produce Company. Green River, Wyo.—The plant of the Green River Brewing Company has been damaged by fire.

Okeechobee, Fla.—The building of a cold storage plant is contemplated by the Okeechobee Ice & Cold Storage Company.

Moundsville, W. Va.—The ice plant of the Reynolds Memorial Hospital, which was recently destroyed by fire, will be rebuilt.

Richmond, Va.—A warehouse at Union and Grace streets has been leased by Morris & Co., which will be remodeled and improved.

Mobile, Ala.—Plans to build a cold storage plant and warehouse on Hieronymus Docks being considered by the State Harbor Board.

Greensboro, Ala.—The Greensboro light and ice plant has been purchased by H. C. Armstrong, president of the City National Bank; R. L. Ellis, H. Mallory and others. It is reported that this plant will be enlarged.

TESTING THE QUALITY OF AMMONIA.*

(W. S. Doan in Refrigerating World.)

Ammonia that is used in compression refrigerating systems is known as liquid anhydrous ammonia. The word anhydrous

*This is the third of a series of articles explaining the ammonia refrigeration compression system in a practical way.

means that the ammonia is free from water. This is absolutely necessary in order that the best results may be obtained. Ammonia is a combination of nitrogen and hydrogen and is expressed by the symbols, N. H₃. This means that an atom of nitrogen has combined with three atoms of hydrogen and produced ammonia.

Pure liquid ammonia is colorless and has a peculiar alkaline odor. It boils or evaporates under atmospheric pressure at a temperature of about 28½ degrees below zero or about 240½ degrees lower than water evaporates under the same atmospheric pressure. The specific heat of ammonia gas as determined by Regnault is .508. The specific heat of the liquid is given as 1.

At ordinary temperature ammonia is a vapor or a gas. At temperature of 30 degrees below zero it becomes a liquid at atmospheric pressure and at higher temperatures if correspondingly higher pressures are employed.

Sources of Ammonia.

Ammonia may be obtained from air, from sal-ammoniac and from the nitrogenous constituents of plants and animal life by the distilling process, and there are very few substances that are absolutely free from it. The chief source of the ammonia used in the refrigerating industry is found during the dry distillation of coal in the making of gas

for fuel and lighting purposes and in the coke ovens of the iron and steel industries.

We hear, sometimes, discussions concerning the purity of the ammonia obtained from different sources, but there really is no difference in the quality of the finished product whether it has been obtained from the gas liquor directly or from the raw material. This is true, however, only providing that the purifying process is continued to that stage when there is nothing left but the ammonia gas. If this is done when the gas is subjected to high mechanical pressure great enough to cause it to liquify the liquid will have the same quality as the gas when delivered to the purchaser providing that the containers or shipping cylinders have been kept cleaned from extraneous matter. The many complaints in the past regarding the quality of ammonia, particularly after it has been in use for a considerable time, have caused the manufacturers to guarantee their product and to request that the purchaser verify the weight and the quality of the ammonia before its use. No claims are allowed after the ammonia has been used because of deficiencies or strength.

Tests for Ammonia.

To test a sample of liquid ammonia it is best to use a flat bottom boiling flask with a wide neck, which can be obtained from any dealer in chemical supplies. Some manu-



Leaking Ammonia Fumes

are deadly as well as costly.

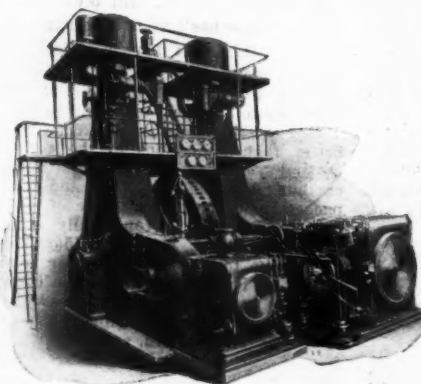
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CHICAGO: Wakem & McLaughlin.
CINCINNATI: Pan-Handle Storage Warehouse.
CLEVELAND: General Cartage & Storage Co.; Harry E. Bollinger.
DETROIT: Michigan Warehouse Co.
DALLAS: Oriental Oil Company.
HAVANA: O. B. Cintas.
HOUSTON: Texas Warehouse Co.
INDIANAPOLIS: Railroad Transfer Co.
JACKSONVILLE: St. Elmo W. Acosta.
KANSAS CITY: Crutcher Warehouse Co.
LIVERPOOL: Peter R. McQuile & Son.
LOS ANGELES: York-California Construction Co.
LOUISVILLE: Union Warehouse Branch.
MEMPHIS: Patterson Transfer Co.
MEXICO, D. F.: Ernst O. Helmsdorf.
MILWAUKEE: Unlop Transfer Company.
NEWARK: American Oil & Sup. Co.
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PHILADELPHIA: Henry Bower Chem. Mfg. Co.
PITTSBURGH: Penna. Transfer Co.; Newman Brothers, Inc.; Penna. Brewers Supply Co.
PORTLAND: Northwestern Transfer Co.
PROVIDENCE: Rhode Island Whse. Co.; Edwin E. Knowles.
RICHMOND: Bowman Transfer & Stge. Whse. Co.
RIO DE JANEIRO: F. H. Walter & Co.
ROCHESTER: Rochester Carting Co.; Shipley Construction & Supply Co.
SALT LAKE CITY: Utah Soap Co.
ST. LOUIS: Pillsbury-Becker Eng. & Supply Co.; McPheters Whse. Co.
SAN ANTONIO: Oriental Oil Co.
SAN FRANCISCO: York-California Construction Co.; Haslett Warehouse Co.
SAVANNAH: Atlantic Lubricants Co.; Benton Transfer Co.
SPOKANE: Spokane Transfer Co.
SEATTLE: York Construction & Supply Co.
TOLEDO: Moreton Truck & Storage Co.; F. W. Babcock.
WASHINGTON: Littlefield, Alvord & Co.

facturers supply these test flasks and also a piece of bent pipe for withdrawing the sample needed.

In making the connection for the withdrawal of the ammonia use a piece of goose-neck pipe. This allows the flask to be held in an upright position when drawing the sample, which is much easier. The rubber stopper prevents any moisture from entering with the ammonia. The pipe should be perfectly clean and dry before using to prevent extraneous material from entering with the sample. It is a good idea to flush the pipe with some liquid ammonia, but care should be taken that none of the frost which accumulates on the outside is allowed to drop back into the flask. When the sample has all been evaporated this moisture will remain and might lead an inexperienced tester to believe that the sample contained water when it did not. As the quantity used to make a test is comparatively small it is best to do the testing on days when the weather is clear, or when the atmosphere is not heavily charged with humidity.

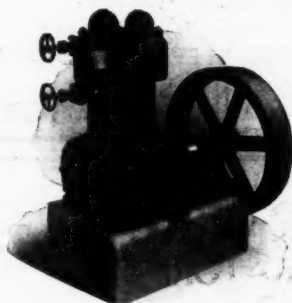
It is best to evaporate a sample immersing the flask in a pail of cold water or brine. This offers a better means than placing the flask on the engine room floor as is done in some instances, or on anything warm. An even and not too violent evaporation is best. The water or brine prevents frost from forming on the outside surface of the flask and any change in the liquid ammonia is readily seen.

Oil Gives Cloudy Appearance.

If as evaporation continues the liquid assumes a cloudy appearance and this becomes more pronounced toward the end of the test this is usually an indication that traces of lubricating oil are present. This might be accounted for in that the cylinder containing the ammonia had not been properly cleaned after its return from some plant in which it had been connected to a part of the system containing lubricating oil. After the liquid has been evaporated any residue remaining consists of the impurities in the ammonia. Water can be readily detected by the globules which will adhere to the inside of the flask. If the flask is perfectly dry with no sign of impurities this indicates that the ammonia is pure so far as liquid or solid impurities are concerned. The evaporative test, however, does not disclose gaseous impurities.

To test foreign gases it is best to turn the cylinder upside down. The reason for this is that the drop pipe inside of the cylinder extends down close to the bottom and when in an upright position the end will not be sealed with liquid, but will be exposed to the gas which collects in the upper part of the cylinder above the liquid. The cylinder valves should be opened slightly to allow any small quantity of liquid remaining in the drop pipe to run out. With a piece of quarter-inch pipe connected to the cylinder valve and the end submerged in a pail of water when the cylinder head is opened slightly bubbles will appear on the surface of the water if permanent gases are present. If these bubbles appear intermit-

WATCH PAGE 48 FOR BARGAINS



MECHANICAL REFRIGERATION

A Modern Sanitary Plant equipped with MECHANICAL REFRIGERATION is a good advertisement—attracting new patrons and broadening your field. The results from this feature alone have, in many instances, justified the investment.

We can be of real service to you in suggesting refrigerating Equipment that will meet your requirements most efficiently and economically.

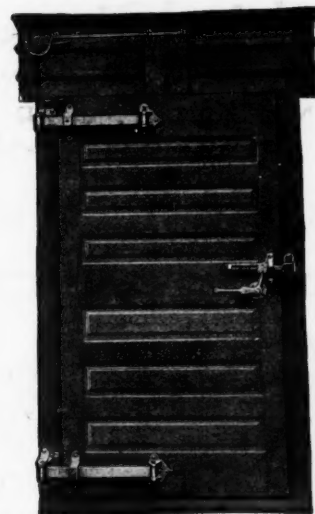
Write us for information and prices.

York Manufacturing Co.

Ice Making and Refrigerating Machinery Exclusively
YORK, PA.

DOORS

For Cold Storage and Freezers



Have you ever examined our "JONES" or "NOEQUAL"

type of Door, and noted the heavy material used in construction, or how the massive "Jones" Automatic Fastener and "Jones" Adjustable Spring Hinges keep the door tight against the double and triple seals of contact.

If not, it's time! You should know why the Big Packers use our doors almost exclusively.

Made with or without trap for overhead rail. Cork insulated. Built for strength. A 96-page illustrated catalog upon request.

JAMISON COLD STORAGE DOOR CO.

Formerly

JONES COLD STORE DOOR CO.
Hagerstown, Maryland, U.S.A.

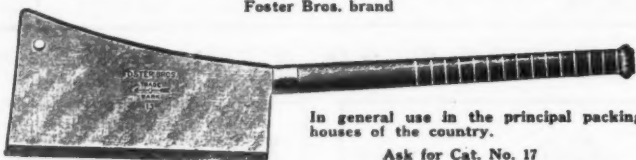
BREWERS and PACKERS SPECIAL ENAMEL

An enamel that will give service on the walls and ceilings of rooms where live steam, grease and fumes compete in attempts at destruction.

THE TROPICAL PAINT AND OIL CO.
Cleveland, O.

BEEF SPLITTERS

Foster Bros. brand



In general use in the principal packing houses of the country.

Ask for Cat. No. 17

SPLITTERS, CLEAVERS, KNIVES, STEELS, ETC.

JOHN CHATILLON & SONS

SCALE MAKERS SINCE 1835

NEW YORK

United Disposal & Recovery Co.

OPERATORS

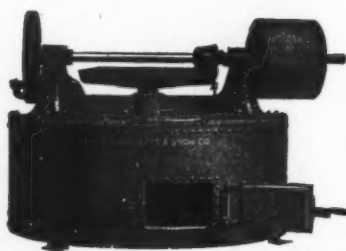
UNITED ENGINEERING CO.

BUILDERS

MUNICIPAL WASTE DISPOSAL PLANTS

1517-30 Corn Exchange Bldg.

CHICAGO, ILL.

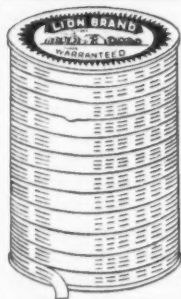


Triumph Steam Dryers

Made in three sizes, ranging in price from \$500.00 to \$1000.00.

Experience of 30 years.

The C. O. Bartlett & Snow Co.
Cleveland Ohio 50 Church Street N. Y. City



CONTRACTORS TO THE GOVERNMENT

TAPES & BRAIDS

FOR THE

PACKING TRADE

WHITE and COLORS

HOFFMAN-CORR MFG. CO.

312 Market Street

Philadelphia, Pa.

Johnson-Morse Can Co.
Wheeling, W. Va.

LARD PAILS

tently with a crackling sound this indicates that a mixture of ammonia and air or other permanent gases are escaping. If any of these gases are inflammable they will ignite when a small flame is held over the surface of the water.

Water has a strong affinity for ammonia, and if no permanent gases are present bubbles will not appear upon the surface. Sometimes a test is made to determine the boiling point at atmospheric pressure. This is done by inserting a low temperature thermometer into the liquid ammonia drawn into a test jar large enough so that a reading may be taken through the side of the jar without removing the thermometer. It is not necessary for the operating man, however, to make this test. If the ammonia contains liquid or solid impurities the boiling point is raised in proportion and naturally such ammonia is rejected.

BUY CALF RENNETS

at highest market price. Correspondence invited.

RICHARD MOLLENHAUER
616 West 39th Street, New York

Horns Wanted

Always in market for No. 1 horns. Send your offer.

Noyes Comb Company
Binghamton, N. Y.

DETROIT



No. 120 Automatic Scale

This is the latest thing in Scale construction and should be seen by every merchant before buying. Designed by the most experienced scale inventors and mechanics in the U. S. Its enclosed Dust Proof Mechanism and other new features meet the latest requirements of the Weights and Measures laws besides insuring accuracy and sensitiveness.

For Butchers and Markets

Detroit Automatic Scale Co.

New York Office,
242 West 14th St.

Established 1896
Detroit, Mich.

FOR PURCHASING DEPARTMENTS

CORK AND INSULATION.

A new and comprehensive work on "Cork and Insulation" has recently been published for the United Cork Companies of New York. It is of over 150 pages, handsomely bound and profusely illustrated, and appears to cover the ground most completely. Part 1 contains general information concerning cork and insulation, the theory of heat transference, what insulation is and how it is used, various forms of cork insulation, with tables of figures, illustrations, etc. Part 2 contains complete construction data, with recommendations and suggestions relating to construction and installation, in rooms or buildings, freezing tanks, coolers, for walls, ceilings, floors, etc. It is a very complete and handy work.

MOTOR TRUCKS ARE IN DEMAND.

"One explanation of the increased demand for motor trucks, which during the year has by far surpassed all expectations, is indicated by a letter from a Kissel dealer in a small Middle Western city," said I. L. Kohn, metropolitan distributor. "This letter, a copy of which has just been sent to me by the factory, was in response to a query as to the trade outlook."

The letter reads in part as follows: "Just a year ago, we had two trucks on our floor which we had stocked at your request, and not because we wanted them. Recently we ordered from you five freight carloads because we wanted them; these in addition to orders that you already had booked for shipment."

YORK REFRIGERATING EQUIPMENT.

The York Manufacturing Company, York, Pa., reports recent sales and installations of refrigerating machinery and equipment as follows:

Beatrice Creamery Company, Chicago, Ill.; one 12-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Independent Creamery Company, Seattle, Wash.; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

United States Government, Navy Department, Bureau of Supplies and Accounts, Washington, D. C.; three 12½-ton vertical single-acting enclosed type refrigerating machines, each direct connected to a vertical enclosed type piston valve engine and condensing side complete; also a freezing system and refrigerating system, including two shell and tube brine coolers and 13,800 feet of 1¼-inch brine piping for various storage spaces. These machines are installed on board the Supply Ship No. 1, Boston, Mass.

Bordens Condensed Milk Company, Farm Products Division, 952 DeKalb avenue, Brooklyn, N. Y.; a 100-ton horizontal double-acting refrigerating machine, direct connected to a Corliss valve engine, and condensing side complete; also a 35-ton flooded freezing system complete.

Bordens Condensed Milk Company, Farm Products Division, 310 East 117th street, New York, N. Y.; one 75-ton horizontal double-acting refrigerating machine, direct connected to a Corliss valve engine, and condensing side complete; also a 29-ton flooded freezing system and refrigerating system, including 4 double-pipe brine coolers and 1,300 feet of 2-inch direct expansion piping for chill room and ice storage room.

Magnolia Petroleum Company, Beaumont,

Tex.; a 100-ton absorption refrigerating machine complete.

Germania Refining Company, Oil City, Pa.; a 100-ton absorption refrigerating machine complete, including 7 "Shipley" flooded double-pipe ammonia condensers; also a 150-ton shell and tube brine cooler. This installation was made in their Rouseville (Pa.) plant.

Salisbury Ice Company, Salisbury, Md.; a 130-ton vertical single-acting, high-speed, belt-driven enclosed type refrigerating machine and condensing side complete; also 3,000 feet of freezing tank coils and miscellaneous material for overhauling their freezing system and changing it to the York improved raw water system.

People's Ice & Cold Storage Company, Warren, Ohio; a 75-ton horizontal double-acting refrigerating machine, direct connected to a Corliss valve engine, and condensing side, including 4 "Shipley" flooded double-pipe ammonia condensers; also a 25-ton flooded freezing system, a 60-ton distilling system and 800 feet of 1¼-inch direct expansion piping.

Kirschbraun & Sons, Omaha, Neb.; one 50-ton vertical single-acting, high-speed, belt-driven enclosed type refrigerating machine.

John G. Millward & Son, Osceola Mills, Pa.; a 12-ton vertical single-acting, belt-driven enclosed type refrigerating machine and condensing side complete; also a 6-ton flooded freezing system.

Leeton Electric Company, Leeton, Mo.; a 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and condensing side complete; also a 2-ton flooded freezing system.

The Peoples Coal & Ice Company, Paris, Tenn.; a 35-ton flooded freezing system complete; also 6 "Shipley" flooded atmospheric ammonia condensers, a 24-inch x 10-foot horizontal ammonia receiver and a double-pipe distilled water cooler.

Baer Bros. Ice & Coal Company, Jacksonville, Tenn.; miscellaneous material for overhauling their plant, including 12,300 feet of 1¼-inch freezing tank coils, two 24-inch x 8-foot vertical ammonia accumulator and 6 atmospheric exhaust steam condensers.

Frye & Co., wholesale and retail meats, Seattle, Wash.; one 6-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Gold Car Heating & Lighting Co., New York, N. Y.; one quarter-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

H. Jewell, meats, Southold, L. I., N. Y.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

F. C. Streckfuss, meat market, 28 Bloomfield avenue, Passaic, N. J.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Jerome Meat Company, Jerome, Ariz.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

J. Mosbacher, market, Bay Shore, L. I., N. Y.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Margaret Louisa Home, New York, N. Y.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Barber & Co., New York, N. Y.; a 1-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine, and high-pressure side complete. This installation was made on board the S.S. "Satsuma."

E. Burger, grocery and meats, 983 Main street, Peekskill, N. Y.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

F. E. Rothamel, Los Angeles, Cal., meat market; a 1-ton vertical single-acting, belt-

driven enclosed type refrigerating machine and high-pressure side complete.

Jos. Meierhauser, meat market, Yankton, S. C.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

El Dorado Meat Company, Stockton, Cal.; a 1-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Otto Ed. Jahrsdoerfer, meats, 402 Onderdonk avenue, Brooklyn, N. Y.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

West Texas Electric Company, ice, Sweetwater, Tex.; one 6-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

J. V. Mast, ice cream and dairy, Newark, Ohio; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Ohio & Pittsburgh Milk Company, Leon, Ohio; one 12-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

F. J. Leonard, Portland, Ore.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete. This installation was made in the Irvington Market, Portland, Ore.

The Gerald Café, Great Falls, Mont.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

C. Wright, restaurant, Seattle, Wash.; one 6-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

A. Rowe Sons Co., meats, Terre Haute, Ind.; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Flint Ice Cream Company, Flint, Mich.; one 12-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

The Furnas Ice Cream Company, Akron, Ohio; two 12-ton vertical single-acting, belt-driven enclosed type refrigerating machines and high-pressure side complete.

R. W. Furnas Ice Cream Company, Terre Haute, Ind.; two 12-ton vertical single-acting, belt-driven enclosed type refrigerating machines and high-pressure side complete.

N. H. Winans Son, milk, Lansing, Mich.; one 12-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Oconto Creamery, Oconto, Wis.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Lansing Pure Ice Company, Lansing, Mich.; one 12-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete; also 8,000 feet of 2-inch full weight piping.

Emil Anderson, creamery, Coldwater, Mich.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

McKay Hotel, Duluth, Minn.; a 1-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

City Meat Market, 416 Michigan avenue, Detroit, Mich.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Spring Brook Dairy, Otisville, Mich.; one 2-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Critchlow & Bros., Kokomo, Ind., meats; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

J. I. Goade, wholesale liquors, Palmerton, Pa.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

(Concluded on page 41)

Chicago Section

Sure Mike! The packer is making all kinds of money—like Kelly is!

This war is no tinhorn horror. It is magnificently, superlatively horrible.

Chicago Board of Trade memberships are selling around \$5,500 net to the buyer.

Martin Delaney says: "If you want to keep fit, don't eat much." We ain't!

"Crowns ain't wuth a domski, anyhow, as summer headgear," sez Nick Roaminghoff, late of Petrograd.

Paradoxical as it may seem, nevertheless: "Uneasy lies the head that wears a crown." And how easy that same head lies!

Not taking sides in the war doesn't indicate absolute neutrality by any means, especially among politicians. The vote is the thing.

Swift and Company's sales of fresh beef in Chicago for the week ending Saturday, March 31, averaged, for domestic beef, 14.65 cents per pound.

The Farmers' Alliance of America has a membership of 2,500,000. That's one reason why a packer looks like a fly-speck to your office-seeking politician.

Bryan's mush is paramount to telling the United States that anybody has a divine right to tell us to roll over, and that we should roll over when he commands.

It is never too late to prepare, and never too soon to begin. Running may be a sport and good exercise all right, but as work or as a necessity it's a frost!

It would seem the American flag commands very little respect abroad, and not nearly what it should at home. The settlements in the melting pot need dumping.

Everyone admires the kid who says to the school bully, "Cut that or I'll bust yer mug!"

and scorns or pities the kid who says: "Now, you behave, or I'll tell teacher!"

Most men would prefer to be thrown off'n the dock to jumping off. It will be one or the other, however, and not a bad bet it will be the latter. Looks like you will win this bet, Sullivan.

Not long ago many of 'em said Woodrow was a coward; the same gang now say he's a phool. Firstly, because he avoided fighting, and, secondly, because he now wants to fight! Did you ever?

Some of our politicians would play politics at the front door of hell. They capitalize envy, hatred, malice and all uncharitableness—and then some! They do not seem to recognize the paths of honor and duty. Summed up, they are not assembled right, thassall.

Mayor Thompson is nothing—if not a politician! (Webster: "A politician is a guy wot pipes which way de gang is headed, then gets out in front and yells, 'Come on!'") So now the poipers come out wit big head lines: "Mayor Thompson heads plan to rush city garden work."

On the provision situation, W. G. Press & Company, say: "Receipts of hogs in eleven markets so far in 1917 are 8,507,000, or 1,025,000 less than for the corresponding period in 1916, and 159,000 more than in 1915. The average weight of hogs in Chicago for the month of March was 209 lbs., against 216 lbs. in March, 1916, 231 lbs. in 1915, 233 lbs. in 1914 and 240 lbs. in 1913. The average weight of hogs in Wichita for the month of March was 185 lbs., against 213 lbs. in March, 1916; average weight in Kansas City for March was 192 lbs., against 203 lbs. in March, 1916; average weight in St. Joseph for March was 230 lbs., against 221 lbs. in March, 1916; average weight in Milwaukee for March was 183 lbs., against 182 lbs. in 1916. Top on cattle today is \$13.15. There was another

sale made at \$13. These are new high record prices for cattle. This makes the cattle market \$1.15 higher than four weeks ago, and \$3.40 higher than for the corresponding day last year. Top on lambs this week is \$15.40, which is \$4 higher than for the corresponding week last year, \$5 higher than in 1915 and \$6.15 higher than in 1914. On better receipts of calves Tuesday, prices broke 25@50c from Monday's market, the choice grades selling for \$13. We look for a much lower market for calves after Easter. Calves have been comparatively higher than anything on the market for some time and as this is the season for better receipts of calves, we expect prices to break \$2 to \$3 a hundred in the next thirty days, but that is the only break of consequence we expect in the livestock market. We have called attention in our recent market letters to this decrease in the supply of marketable hogs, and also to the fact that brood sows were being held until the next season, which will give us lighter receipts of hogs all summer.

"The stocks of provisions held in Chicago on April 1st show that the stock in pork is very light. The stock of lard is also light, and as it is generally known a good deal of lard has been sold to be shipped, it makes it more noticeable. The stock of ribs shows a good decrease, and as the ribs now held are of good quality, we consider this showing bullish. The stock of hams, while about the same as last year, is not burdensome, owing to the probability of lighter hog receipts. We are coming into the ham season with warmer weather, and the next report will probably show a decrease in the stock.

"The strong position of the future provision market on the eve of a declaration of war indicates what will happen when war is actually on. We hesitate to predict how high we think provisions will sell after war is declared, but one fact is certain, that the late advance in the future markets is an indication of much higher prices for all hog products."

Established 1877
W. G. PRESS & CO.
175 W. Jackson Blvd., Chicago
PORK LARD SHORTRIBS
For Future Delivery
GRAIN Correspondence Solicited **STOCKS**

H. P. Henschien R. J. McLaren
HENSCHEN & McLAREN
Architects
Old Colony Bldg. Chicago, Ill.
PACKING PLANTS AND COLD STORAGE CONSTRUCTION.

J. B. ZIEGLER & CO.
Greases, Tallows, Oils
Stearines
Tankage, Bones, Hoghair
Consignments Solicited
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H. C. GARDNER F. A. LINDBERG
GARDNER & LINDBERG
ENGINEERS
Mechanical, Electrical, Architectural
Specialties: Packing Plants, Cold Storage,
Manufacturing Plants, Power Installations,
Investigations.
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CHEMICAL & ENGINEERING CO.
Expert Assistance
CHEMISTS BACTERIOLOGISTS
Chemical control of Packing Plants. Yearly
contracts solicited.
908 SO. DEARBORN ST. CHICAGO, ILL.

D. E. Washington, Mgr. & Chief Engr. Wm. H. Kneans, Associate Engr.
PACKERS ARCHITECTURAL & ENGINEERING CO.
—ENGINEERS—
PACKING HOUSES, ABATTOIRS, COLD STORAGE
Manhattan Bldg., CHICAGO, ILL. Cable Address Pacarco

John Agar Co.
Union Stock Yards CHICAGO, ILL.
Packers and Commission Slaughterers
Beef, Pork and Mutton
Members of the American Meat
Packers' Association.

DOES your engineer run **YOUR** refrigerating plant to produce best results using an anhydrous ammonia he knows is best for **YOUR** interest, or

Must he produce the best results he can with an anhydrous ammonia which is purchased upon a basis **OTHER** than that of quality?

Your engineer knows that a guaranteed pure and dry anhydrous ammonia made from a strictly mineral base does produce best results.

Only by using such an ammonia can you reduce operating expenses.

Anhydrous **SUPREME** Ammonia

"EVERY OUNCE ENERGIZES"

Fill your requirements.

Used by most of the leading packers throughout the United States.

SUPREME means pure, dry, highest quality anhydrous ammonia.

Less power and less coal = less expense.

Better refrigeration and more satisfaction = greater efficiency.

MORRIS & COMPANY

Chicago, U. S. Yards

CHICAGO PACKING COMPANY

Beef and Pork Packers

Boneless Beef Cuts.

Sausage Materials.

Commission Slaughterers.

U. S. GOVERNMENT INSPECTION

Correspondence Solicited

UNION STOCK YARDS
CHICAGO

Double Refined **NITRATE OF SODA**

Guaranteed to pass B. A. I.
Requirements

San Francisco Salt Refinery
San Francisco, Cal.

and

Stauffer Chemical Co.

Chauncey, New York

Members of American Meat Packers Assn.

The National Supply & Equipment Co.

Peoples Gas Bldg. Chicago, Ill.

Agents

BONE CRUSHERS



WILLIAMS

Williams Bone Crushers and Grinders are not alone suitable for grinding bone for fertilizer purposes, they are also suitable for crushing bone for glue and case hardening purposes. Every packer having to dispose of his bone whether Green, Raw, or Junk and Steamed bone, will do well to get in touch with Williams.

Williams machines are also suitable for Tankage, Cracklings, Beef Scrap, Oyster and Clam Shells, and any other material found around the packing plant requiring crushing or grinding.

Send for catalog No. 9.

THE WILLIAMS PAT. CRUSHER & PULVERIZER CO.

Works:
ST. LOUIS

General Sales Dept., Old Colony Bldg.

CHICAGO

285 Market St.
SAN FRANCISCO

R. W. BARNES

Broker in

PROVISIONS AND LARD

49 Board of Trade, Chicago

W. G. AGAR & CO. BROKERS

Packing House Products and By-Products

Dressed Beef, Fresh Pork, Dressed Pigs, Provisions, Lard, Tallow, Grease, Oils,
Fertilizer, Hides, Bones.

27 BEAVER STREET,

NEW YORK CITY

Watch Page 48 for Business Chances

CHICAGO LIVE STOCK

RECEIPTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, March 26.....	18,931	2,480	48,024	17,773
Tuesday, March 27.....	5,517	8,506	17,109	14,965
Wednesday, March 28.....	17,874	3,594	30,416	19,644
Thursday, March 29.....	4,078	4,074	19,895	15,579
Friday, March 30.....	1,618	685	15,097	9,959
Saturday, March 31.....	424	52	12,716	1,276
Total last week.....	48,442	19,471	144,037	79,196
Previous week.....	35,021	11,760	109,399	76,338
Cor. week, 1916.....	43,590	12,126	149,975	52,176
Cor. week, 1915.....	32,378	11,765	100,343	40,181

SHIPMENTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, March 26.....	3,591	...	5,884	3,619
Tuesday, March 27.....	1,710	71	2,252	2,925
Wednesday, March 28.....	3,841	13	4,452	2,907
Thursday, March 29.....	2,805	49	3,099	3,750
Friday, March 30.....	1,432	10	2,079	2,850
Saturday, March 31.....	162	...	1,717	...
Total last week.....	13,541	143	20,064	16,061
Previous week.....	9,757	27	33,201	15,107
Cor. week, 1916.....	10,227	290	23,890	14,867
Cor. week, 1915.....	7,371	20	8,616	5,160

CHICAGO TOTAL RECEIPTS LIVESTOCK.

	Cattle.	Hogs.	Sheep.
Year to March 31, 1917.....	686,097	2,542,213	905,196
Same period, 1916.....	607,300	2,907,966	919,078

Combined receipts of hogs at eleven points:

Week ending March 31, 1917.....	516,000
Previous week.....	380,000
Cor. week, 1916.....	485,000
Cor. week, 1915.....	462,000
Total year to date.....	8,292,000
Same period, 1916.....	9,397,000
Same period, 1915.....	8,153,000

Receipts at seven points (Chicago, Kansas City, Omaha, St. Louis, St. Joseph, Sioux City, St. Paul) as follows:

	Cattle.	Hogs.	Sheep.
Week to March 31, 1917.....	175,590	440,100	207,200
Previous week.....	119,400	328,100	182,700
Same period, 1916.....	141,400	407,400	157,100
Same period, 1915.....	113,100	376,100	160,600

Combined receipts at seven markets for 1917 to March 31, 1917, and the same period a year ago:

	1917.	1916.
Cattle.....	2,145,000	1,894,000
Hogs.....	7,170,000	7,966,000
Sheep.....	2,600,000	2,535,000

CHICAGO PACKERS' HOG SLAUGHTER.

Week ending March 31, 1917:	
Armour & Co.....	25,800
Swift & Co.....	14,000
Wilson & Co.....	10,000
Morris & Co.....	7,200
Hammond Co.....	7,300
Western Packing Co.....	5,900
Anglo-American.....	5,600
Independent P. Co.....	4,700
Boyd-Lunham.....	5,400
Roberts & Oake.....	3,800
Brennan P. Co.....	5,700
Miller & Hart.....	3,400
Others.....	15,900
Totals.....	114,700
Total last week.....	87,400
Total corresponding week, 1916.....	121,500
Total corresponding week, 1915.....	103,700

WEEKLY AVERAGE PRICE OF LIVESTOCK.

	Cattle.	Hogs.	Sheep.	Lambs.
This week.....	\$11.35	\$15.10	\$11.80	\$14.00
Previous week.....	11.50	15.00	12.10	13.75
Cor. week, 1916.....	8.80	9.60	8.35	10.60
Cor. week, 1915.....	7.45	6.85	7.10	9.20
Cor. week, 1914.....	8.40	8.70	6.35	7.85
Cor. week, 1913.....	8.35	9.20	6.50	8.60
Cor. week, 1912.....	7.45	7.90	5.90	7.80

*Record.

CATTLE.

Good to choice steers.....	\$11.50@12.85
Yearlings, good to choice.....	10.75@12.50
Fair to good steers.....	9.50@10.75
Stockers and feeders.....	7.50@9.33
Fair to good cows.....	7.00@10.00
Good to choice heifers.....	8.00@10.50
Canners.....	5.00@6.50

Cutters.....	6.00@7.15
Bologna bulls.....	7.50@8.15
Butcher bulls.....	8.00@9.50
Good to prime calves.....	12.00@14.25

HOGS.

Prime light butchers.....	\$15.00@15.50
Fair to fancy light.....	14.85@15.25
Medium wt. butchers, 200-250 lbs.....	15.15@15.40
Heavy butchers, 250-400 lbs.....	15.20@15.45
Choice heavy packing.....	14.85@15.20
Rough heavy packing.....	14.60@15.00
Pigs, fair to good.....	11.00@12.50
Stags (subject to 80 lbs. dockage).....	14.50@15.35

SHEEP.

Yearlings.....	\$12.00@14.00
Fair to choice ewes.....	9.00@12.00
Wethers, fair to choice.....	11.00@12.05
Clipped ewes.....	10.00@10.85
Western lambs.....	14.50@15.40
Feeding lambs.....	14.00@15.25
Native lambs.....	14.00@15.25
Shorn lambs.....	11.50@12.75

CHICAGO PROVISION MARKETS

Range of Prices.

SATURDAY, MARCH 31, 1917.

	Open.	High.	Low.	Close.
PORK—(Per bbl.)—				
May.....	\$34.00	\$34.62	\$34.00	†\$34.62
July.....	33.80	33.90	33.00	33.60

LARD—(Per 100 lbs.)—				
May.....	20.20	20.22	20.02	\$20.12
July.....	20.35	20.40	20.15	20.27
September.....	20.25	20.45	20.25	20.40

RIBS—(Boxed, 25c. more than loose)—				
May.....	18.40	18.40	18.30	†18.32
July.....	18.57	18.57	18.47	†18.50

MONDAY, APRIL 2, 1917.

PORK—(Per bbl.)—				
May.....	34.75	34.90	34.75	†34.75
July.....	33.55	34.00	33.55	34.00

LARD—(Per 100 lbs.)—				
May.....	19.95	20.30	19.95	20.27
July.....	20.12	20.42	20.12	†20.40
September.....	20.25	20.60	20.25	†20.52

RIBS—(Boxed, 25c. more than loose)—				
May.....	18.20	18.42	18.20	†18.40
July.....	18.45	18.62	18.45	18.57

TUESDAY, APRIL 3, 1917.

No market.

WEDNESDAY, APRIL 4, 1917.

PORK—(Per bbl.)—				
May.....	35.00	35.22	34.95	35.15
July.....	34.40	34.65	34.20	34.65

LARD—(Per 100 lbs.)—				
May.....	20.35	20.65	20.32	†20.65
July.....	20.52	20.80	20.50	†20.80
September.....	20.67	20.85	20.67	†20.85

RIBS—(Boxed, 25c. more than loose)—				
May.....	18.50	18.65	18.50	18.62
July.....	18.65	18.80	18.65	†18.80
September.....	18.90	18.90	18.90	†18.90

THURSDAY, APRIL 5, 1917.

PORK—(Per bbl.)—				
May.....	35.35	35.90	35.30	35.90
July.....	34.85	35.10	34.75	35.10

LARD—(Per 100 lbs.)—				
May.....	20.80	20.87	20.67	†20.85
July.....	21.00	21.10	20.87	21.10

RIBS—(Boxed, 25c. more than loose)—				
May.....	18.80	18.87	18.67	†18.85
July.....	18.92	19.05	18.87	†19.05

FRIDAY, APRIL 6, 1917.

No market.

†Bid. ‡Asked.

POELS & BREWSTER
17 Battery Place New York
Import Agents
Hides, Skins, Pickled Pelts,
Wool, Tallow and Casings

CHICAGO RETAIL FRESH MEATS.

(Corrected weekly by Pollack Bros., 41st and Halsted Streets.)

Beef.

Native Rib Roast.....	25	@28
Native Sirloin Steaks.....	28	@32
Native Porterhouse Steaks.....	35	@38
Native Pot Roasts.....	20	@24
Rib Roasts from light cattle.....	14	@18
Beef Stew.....	14	@18
Boneless Corned Briskets, Native.....	18	@20
Corned Rumps, Native.....	18	@20
Corned Ribs.....	15	@15
Corned Flanks.....	15	@15
Round Steaks.....	18	@25
Round Roasts.....	16	@18
Shoulder Steaks.....	18	@20
Shoulder Roasts.....	18	@22
Shoulder Neck End, Trimmed.....	18	@18
Rollad Roast.....	22	@25

Lamb.

Half Quarters, fancy.....	28	@30
Fore Quarters, fancy.....	22	@26
Legs, fancy.....	20	@20
Stew.....	18	@18
Chops, shoulder, per lb.....	22	@24
Chops, rib and loin, per lb.....	25	@28
Chops, French, each.....	15	@15

Mutton.

Legs.....	18	@22
Stew.....	14	@16
Shoulders.....	16	@18
Half Quarters.....	18	@22
Fore Quarters.....	14	@16
Rib and Loin Chops.....	28	@30
Shoulder Chops.....	18	@20

Pork.

Pork Loins.....	22	@25
Pork Chops.....	25	@27
Pork Shoulders.....	20	@20
Pork Tenders.....	38	@38
Pork Butts.....	23	@23
Spare Ribs.....	20	@20
Hocks.....	15	@15
Pigs' Heads.....	12 1/2	@12 1/2
Leaf Lard.....	22	@22

Veal.

Half Quarters.....	22	@25
Fore Quarters.....	14	@18
Legs.....	22	@25
Breasts.....	16	@18
Shoulders.....	18	@20
Cutlets.....	35	@35
Rib and Loin Chops.....	28	@30

Butchers' Offal.

Suet.....	12	@12
Tallow.....	5	@5
Bones, per cwt.....	75	@75
Calfskins, 8 to 15 lbs.....	35	@35
Calfskins, under 18 lbs. (deacon's).....	75	@75
Kips.....	25	@25

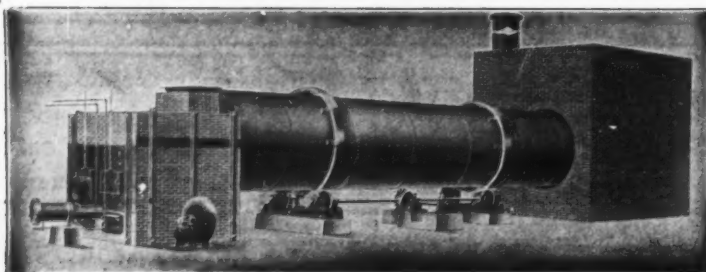
STERNE & SON CO.

Just Brokers

Tallow, Grease, Stearine
Animal and Vegetable Fats and Oils
Postal Tel. Bldg. Chicago

Watch Page 48 for
Business Chances

DRYERS AND CONTINUOUS PRESSES

Economical Efficient
Great Capacity

SAVING IN LABOR ALONE IN ONE YEAR WILL
OFFSET COST TO INSTALL

For Tankage, Blood, Bone, Fertilizer, all Animal and
Vegetable Matter. Installed in the largest packing-
houses, fertilizer and fish reduction plants in the world.

Send for Catalogue T. B.

American Process Co.
68 William St., - - New York

CHICAGO MARKET PRICES

WHOLESALE FRESH MEATS.
Carcass Beef.

Prime native steers	16½@17½
Good native steers	15½@16½
Native steers, medium	14 @15
Heifers, good	14½@15½
Cows	12½@13½
Hind Quarters, choice	@19
Fore Quarters, choice	@15

Beef Cuts.

Beef Tenderloins, No. 1	@35
Beef Tenderloins, No. 2	@32
Steer Loins, No. 1	@27
Steer Loins, No. 2	@22
Steer Short Loins, No. 1	@35
Steer Short Loins, No. 2	@28
Cow Loins	@15
Steer Loin Ends (hips)	@20
Cow Short Loins	16½@19½
Cow Loin Ends (hips)	@15
Sirloin Butts, No. 3	@19
Strip Loins, No. 3	@13
Steer Ribs, No. 1	@22
Steer Ribs, No. 2	@21
Cow Ribs, No. 1	@16
Cow Ribs, No. 2	@15
Cow Ribs, No. 3	@12½
Rolls	@13
Steer Rounds, No. 1	@16
Steer Rounds, No. 2	@15
Cow Rounds	@12½
Flank Steak	@18
Rump Butts	@16
Steer Chucks, No. 1	@15
Steer Chucks, No. 2	@14
Cow Chucks	@13
Boneless Chucks	@15
Steer Plates	@13
Medium Plates	@12
Briskets, No. 1	@14½
Briskets, No. 2	@13½
Shoulder Clods	@15½
Steer Navel Ends	@13
Cow Navel Ends	@12½
Fore Shanks	@8
Hind Shanks	@6
Hanging Tenderloins	@12
Trimblings	12½@13

Beef Offal.

Brains, per lb.	9 @10
Hearts	9½@10½
Tongues	@18½
Sweetbreads	@25
Ox Tail, per lb.	@10
Fresh Tripe, plain	7½@8
Fresh Tripe, H. C.	8 @9
Livers	8½@11
Kidneys, per lb.	@7½

Veal.

Heavy Carcasses, Veal	13½@15½
Light Carcasses	@20
Good Carcasses	@18
Good Saddle	@21
Medium Racks	@14
Good Racks	16½@17½

Veal Offal.

Brains, each	8 @10
Sweetbreads	@45
Calf Livers	@24
Heads, each	@30

Lambs.

Good Cawl Lambs	@19
Round Dressed Lambs	@21
Saddles, Cawl	@21
R. D. Lamb Fores	@18
Cawl Lamb Fores	@17
R. D. Lamb Saddles	@23
Lamb Fries, per lb.	@20
Lamb Tongues, each	@4
Lamb Kidneys, per lb.	@20

Mutton.

Medium Sheep	@18
Good Sheep	@19
Medium Saddles	@19
Good Saddles	@21
Good Fores	@17
Medium Racks	@16
Mutton Legs	@20
Mutton Loins	@15
Mutton Stew	13½@15½
Sheep Tongues, each	@4
Sheep Heads, each	@9

Fresh Pork, Etc.

Dressed Hogs	@17
Pork Loins	@21½
Leaf Lard	@21
Tenderloins	@35
Snare Ribs	@21½
Butts	@14½
Hocks	@14
Trimblings	@17½
Extra Lean Trimblings	@22½
Tails	@12
Snouts	@11
Pigs' Feet	@7
Pigs' Heads	@12
Blade Bones	@9
Blade Meat	9 @9½
Cheek Meat	@13½
Hog Livers, per lb.	6½@8
Neck Bones	@6½
Skinned Shoulders	@18½
Pork Hearts	@11
Pork Kidneys, per lb.	@11
Pork Tongues	@19
Shin Bones	@9
Tail Bones	7½@8
Brains	@8
Backfat	@20
Hams	@24
Calas	@18½

Bellies
Shoulders

SAUSAGE.

Columbia Cloth Bologna	@13½
Bologna, large, long, round, in casings	@13½
Choice Bologna	@15
Frankfurters	@18½
Liver, with beef and pork	@13½
Tongue and blood	@17½
Minced Sausage	@17½
New England Sausage	@23½
Prepared Luncheon Sausage	@19½
Special Compressed Sausage	@19½
Berliner Sausage	@27½
Oxford Lean Butts	@15½
Polish Sausage	@15½
Garlic Sausage	@15½
Country Smoked Sausage	@17½
Country Sausage, fresh	@20½
Pork Sausage, bulk or link	@17½
Pork Sausage, short link	@18
Boneless lean butts in casings	@33½
Luncheon Roll	@18½
Delicatessen Loaf	@18
Jellied Roll	@19

Summer Sausage.

Best Summer H. C. (new)	@32
German Salami	@30½
Italian Salami (new goods)	@34
Holsteiner	@24½
Mettwurst	@25½
Farmer	@26½
Cervelat, new	@32½

Sausage in Brine.

Bologna, kits	@1.95
Bologna, ½¢@½¢	2.55@9.95
Pork, link, kits	@2.40
Pork, links, ½¢@½¢	3.05@12.35
Polish sausage, kits	@2.40
Polish sausage, ½¢@½¢	3.05@12.35
Frankfurts, kits	@2.30
Frankfurts, ½¢@½¢	3.10@12.05
Blood sausage, kits	@1.95
Blood sausage, ½¢@½¢	2.55@9.95
Liver sausage, kits	@1.95
Liver sausage, ½¢@½¢	2.55@9.95
Head cheese, kits	@1.95
Head cheese, ½¢@½¢	2.55@9.95

VINEGAR PICKLED GOODS.

Pickled Pigs' Feet, in 200-lb. barrels	\$14.00
Pickled Plain Tripe, in 200-lb. barrels	16.00
Pickled H. C. Tripe, in 200-lb. barrels	18.55
Pickled Ox Lips, in 200-lb. barrels	22.00
Pickled Pork Snouts, in 200-lb. barrels	—
Sheep Tongues, Short Cut, barrels	—

CORNED, BOILED AND ROAST BEEF.

No. 1, 2 doz. to case	\$2.15
No. 2, 1 or 2 doz. to case	4.15
No. 6, 1 doz. to case	14.50
No. 14, ½ doz. to case	41.50

EXTRACT OF BEEF.

2-oz. jars, 1 doz. in box	\$2.85
4-oz. jars, 1 doz. in box	5.70
8-oz. jars, ½ doz. in box	10.75
16-oz. jars, ¼ doz. in box	20.00

BARRELLED BEEF AND PORK.

Extra Plate Beef, 200-lb. barrels	@30.50
Plate Beef	@29.00
Prime Mess Beef	@—
Mess Beef	@—
Beef Hams (220 lbs. to bbl.)	@—
Rump Butts	@26.00
Mess Pork	@37.00
Clear Fat Backs	@40.00
Family Back Pork	@39.50
Bean Pork	@34.50

LARD.

Pure lard, kettle rendered, per lb., tes.	@23½
Pure lard	@22½
Lard, substitute, tes.	@15½
Lard compounds	@15½
Cooking oil, per gal., in barrels	@1.14
Cooks' and bakers' shortening tubs	@22½
Barrels, ½¢. over tierces, half barrels, ¼¢. over tierces; tubs and pails, 10 to 80 lbs., ¼¢. to 1¢. over tierces.	—

BUTTERINE.

1 to 6, natural color, solids, f. o. b. Chicago	@24
Cartons, rolls or prints, 1 lb.	@25
Cartons, rolls or prints, 2½ lbs.	16½@24½
Shortenings, 30@60 lb. tubs	@13

DRY SALT MEATS.

(Boxed. Loose are ¼¢. less.)	
Clear Bellies, 14@16 avg.	@21½
Clear Bellies, 18@20 avg.	@21
Rib Bellies, 20@25 avg.	@20½
Fat Backs, 10@12 avg.	@19½
Fat Backs, 12@14 avg.	@20½
Fat Backs, 14@16 avg.	@20½
Extra Short Ribs	@19½
Extra Short Ribs	@19½
D. S. Short Clears, 20@25 avg.	@21½
Butts	@17½

WHOLESALE SMOKED MEATS.

Hams, 12 lbs., avg.	@24
Hams, 16 lbs., avg.	@24½
Skinned Hams	@26
Calas, 4@6 lbs., avg.	@19½
Calas, 6@12 lbs., avg.	@19½
New York Shoulders, 8@12 lbs., avg.	@21½
Breakfast Bacon, fancy	@33½
Wide, 10@12 avg., and strip, 5@8 avg.	@28
Wide, 6@8 avg., and strip, 3@4.	@28½
Rib Bacon, wide, 8@12 avg., and strip, 4@6 avg.	@22
Dried Beef Sets	@32

Dried Beef Insides	@34
Dried Beef Knuckles	@31
Dried Beef Outsides	@30½
Regular Botted Hams	@34½
Skinned Botted Hams	@35½
Botted Calas	@20½
Cooked Loin Rolls	@37
Cooked Rolled Shoulder	@26½

SAUSAGE CASINGS.

P. O. B. CHICAGO.

Beef rounds, per set	@14
Beef exports, rounds	@30
Beef middles, per set	@40
Beef bungs, per piece	@13
Beef weasands	@8½
Beef bladders, medium	@80
Beef bladders, small, per doz.	@90
Hog casings, free of salt	@70
Hog middles, per set	@18
Hog bungs, export	@16
Hog bungs, large	@7½
Hog bungs, prime	@9
Hog bungs, narrow	@8
Hog stomachs, per piece	@6
Imported wide sheep casings	•
Imported medium wide sheep casings	•
Imported medium sheep casings	•

*Owing to unsettled war conditions reliable sheep casing quotations cannot be given.

FERTILIZERS.

Dried blood, per unit	4.30 @4.35
Hoof meal, per unit	4.00 @4.10
Concentrated, tankage, ground	3.85 @3.95
Ground tankage, 11%	4.25 @4.30
Ground tankage, 9 and 20%	4.10 @4.15
Crushed tankage, 9 and 20%	3.90 @4.00
Ground tankage, 6½ and 30%	29.00 @30.00
Ground raw bone, per ton	28.00 @29.00
Ground steam bone, per ton	23.50 @24.50

HORNS, HOOFS AND BONES.

Horns, No. 1, per ton	160.00@175.00
Horns, black, per ton	40.00@45.00
Horns, striped, per ton	40.00@45.00
Horns, white, per ton	45.00@50.00
Flat shin bones, 40 lbs. ave., per ton	65.00@70.00
Round shin bones, 35-40 lbs., av. per ton	60.00@70.00
Round shin bones, 50-52 lbs., av. per ton	75.00@80.00
Long thigh bones, 90-95 lbs., av. per ton	110.00@120.00
Skulls, jaws and knuckles, per ton	35.00@40.00

LARD.

Prime steam, cash	@20.70
Prime steam, loose	@20.30
Leaf	@19.75
Compound	@16.00
Neutral Lard	22½@22½

STEARINS.

Prime oleo	15½@16
Tallow	@—
Grease, yellow	12½@12½
Grease, A white	13½@14

OILS.

Oleo oil, extra	@20
Oleo oil, No. 2	@20½
Oleo stock	@17
Linseed, bbls.	@—
Corn oil, loose	13 @13½
Soya bean oil, sellers tank, f. o. b. coast	@11

TALLOW.

Edible	@14
Prime Country	@14½
Packers' Prime	@14
Packers' No. 1	@14
Packers' No. 2	@13½

GREASES.

White, choice	13½@13½
White "A"	13 @13½
White, "B"	12½@12½
Bone, naphtha extracted	8½@8½
Crackling	12½@12½
House	12½@12½
Yellow	12½@12½
Brown	11 @11½
Glycerine, C. P.	@35
Glycerine, dynamite	@33
Glycerine, crude soap	@39
Glycerine, candle	@44

COTTONSEED OILS.

P. S. Y., loose, Chicago	@1.12½
P. S. Y., soap grade	@1.00
Soap stock, bbls., concn., 62@65% f. a. 5%	5½
Soap stock, loose, reg., 50% f. a. 5%, Tex.	3½

COOPERAGE.

Ash pork barrels, black iron hoops	1.20@1.25
Oak pork barrels, black iron hoops	1.25@1.30
Ash pork barrels, galv. iron hoops	@1.35
Red oak lard tierces	1.05@1.07½
White oak lard tierces	1.90@1.95
White oak Cuban tierces, galv. iron hoops	@2.75

CURING MATERIALS.

Refined saltpetre	31 @35
Refined nitrate of soda, car lots f. o. b.	—
N. Y.	5 @5½
Boracic acid, crystal to powdered	11½@15
Borax	6½@7½
Sugar—	—
White, clarified	@7½
Plantation, granulated	@7½
Yellow, clarified	@7½

F. o. b. Chicago.

Salt—	—
Ashton, in sacks, 224 lbs.	2.70
Ashton, ear lots, per sack	2.80
English packing, T. H. & Co., car lots, per sack	—
English packing, Cheshire, car lots, per sack	—
English packing, pure dried, vacuums, per sack	—
English packing, Liverpool ground, alum, per sack	—
Michigan, granulated, car lots, per ton	6.20
Michigan, medium car lots, per ton	7.70

Prices f. o. b. Chicago.

Retail Section

PRACTICAL TALKS WITH SHOP BUTCHERS

If You Give Employees a Share of Profits, Read This

By Elton J. Buckley.

My observation is that more and more employers, not only manufacturers and wholesalers, but retailers as well, are adopting the plan of speeding up their employees by offering them a share in the profits. I have come into personal contact with a number of these plans and believe they work out very well. Many employers using them, however, err in not making the payment of the employee's share of the profits dependent on his remaining in the employ up to the very day of distribution.

A case was recently decided in Pennsylvania which compelled a manufacturer to give a share in eleven months' profits to a discharged employee. Another case almost like it has been decided by the highest court of Wisconsin.

The Pennsylvania case is exceedingly interesting. A Pennsylvania chocolate manufacturer had a plan of giving certain of his employees a profit-sharing bonus amounting to 20 per cent. of their wages. An employee named Snyder worked a year and got his. In the envelope with it came a note reading thus:

"We hope that the coming year will see each one of our employees taking a little more active interest in the welfare of the business in which they share the profits. By each employee giving this business their best efforts and their work the closest attention, our mutual interests will be materially benefited."

Snyder worked along into the second year, and had worked eleven months of it when they discharged him. It does not appear what for. One month later the company handed its employees the usual 20 per cent. bonus, but Snyder was out, and there was no envelope for him.

He demanded it, but the company refused it and he sued, carrying the case clear up to the Appeal Court. The latter said he was entitled to his bonus, because there was no contract or arrangement between him and his former employer limiting the right to the bonus to the employees who remained in the service up to the time of distribution.

Let me reproduce the following from the Appeal Court's decision:

If we examine the letter (reproduced above) which accompanied the first year's bonus, we can readily see that the purpose of the offering of the bonus was that the employees might continue to work for the defendant company, and that in their continuing in its employ, they might render more efficient service. It will be perceived that the letter concedes to the employee that he is a sharer in the profits.

The position the defendant company takes is that this additional compensation was a mere gratuity and that no legal obligation can arise from "a source so casual and unintended." We may assume that the payment of the additional wages was dependent upon the success of the business, and that there was no absolute promise to pay a definite sum contained in the letter above referred to.

What amount was to be distributed was to be determined by the board of directors. It was certain that the workmen were to have a share in the profits, if any were made. The promise was that at the end of the year there would be some distribution of profits, if any were made, and after the company fixed the amount which was to be distributed, all the laborers employed by the company who had taken employment under the promise to share if they continued to work during the year, were entitled to receive their extra compensation fixed at 20 per cent. of their wages during the year. All the elements of a valid contract were present.

The company in effect informed this plaintiff that they would not promise him definitely how much extra compensation he would get, but that when they fixed the rate of extra wages, he would get his share. It is not claimed that the services rendered by the plaintiff during his employment were not faithful, nor is any cause alleged why he should not get his bonus, other than the fact that the company denies the binding force of its promise and alleges that the fact that he was laid off before the end of the year deprived him of any participation in the extra wages paid.

As to the latter phase of the defense, the learned trial judge ruled that if the plaintiff rendered satisfactory services to the defendant down to the time he was discharged, and was ready and willing to render like services for the remainder of the year and was prevented from so doing only by the failure of the defendant to assign him to duty, then he is entitled to recover his share of the profits for the entire year. We see no error in this.

In the Wisconsin case the employer agreed to pay his employees a share in the profits of the business in case they remained with it for two continuous years. One employee stayed along until one day before the two years had expired, when he was discharged. He demanded his share of the profits, and when he was refused, went into court. The court ruled that "an employee who has been promised a share of the profits of the business in case he rendered two years' continuous service, could not be deprived of his right thereto by a discharge without cause one day before the expiration of the required period."

There are several other recent decisions in profit-sharing cases, the substance of which is that where an employer promises an employee a share of the profits at the end of the year, he cannot get rid of his obligation by discharging the employee, in advance of the distribution of profits without cause. He can always discharge him with cause, however, and if there was cause, the employee's right to the bonus is gone, because he didn't earn it.

And I venture the opinion that it would also be gone even in case of discharge without cause, if the employee had signed a contract containing the following:

The said bonus is to be given the said employee only if said employee remains in the employ of the said employer until the end of the current year. Removal from the service, whether with or without cause reflect-

ing upon the said employee's services, shall forfeit all right to said bonus.

(Copyright, April, 1917, by Elton J. Buckley.)

LOCAL AND PERSONAL.

O. A. Godske sold his meat market in Wilton, Iowa, to C. E. Richard's Sons of Muscatine, Iowa.

A. C. Galitz has opened a new meat market at the corner of Maple avenue and Davis street, Evanston, Ill.

William Farrand's meat shop in the Ashley Building on New York avenue, Ogdensburg, N. Y., has been destroyed by fire.

George B. Wyman, for many years in the meat business, died at his home in Brimfield, Ill., at the age of 54.

Michael Lopriore, whose market was recently destroyed by fire, has opened for business at 200 East Centre street, Mahoney City, Pa.

The Packing House Market on South Travis street, Sherman, Tex., has been destroyed by fire.

The New Brunswick Grocery Company, 193 Neilson street, New Brunswick, N. J., to deal in groceries, food products, etc., has been incorporated with a capital stock of \$50,000.

The meat firm of Grant & Furrow at East Lynn, Ill., has dissolved partnership, Mr. Furrows retiring and Mr. Grant continuing the business.

George L. Parker, who has conducted a meat business at 149 Front street, Portland, Ore., will move his business to a new location on the west side of Fourth street.

F. O. Bishop has purchased the White Way Meat Market, Nevada, Iowa, from Thompson & Son.

L. N. Hinton has opened in the meat business at Latha, Kan.

F. J. Alstott has purchased the meat market of B. D. Stevenson in Oshkosh, Neb.

E. Boswell has purchased the meat market in Filley, Neb., formerly operated by Peter Aaronhold.

W. N. Beck has been succeeded in the meat business at Coatesfield, Neb., by W. W. Barnes.

Thomas J. Hallahan of Winthrop street, Taunton, Mass., has retired from the meat business.

N. A. Rowden sold his grocery and meat market in Cuba, Ill., to George S. Sides of Peoria, Ill.

A committee of twelve has been appointed to form a co-operative society for conducting a Kosher meat store in Cincinnati, Ohio. This society will be known as the Jewish Co-operative Society of Cincinnati.

Borough Beef & Provision Company, Brooklyn, N. Y., to deal in meats and groceries, has been incorporated with a capital stock of \$10,000 by Charles A. Bechstein, Robert J. Kahn and Irene M. Cromie.

A. M. Markinson took over the meat business in Ely, Minn., of Koval & Sons.

Samuel Joynt has sold his meat market in Ivanhoe, Minn., to John Gorecki.

Arthur Berg bought a meat market in Buffalo, N. D.

The meat market of Lemuel Armintrout at Pullman, Mich., was recently visited by burglars.

Wm. Ward has purchased the interest of his partner in the meat firm of Ward & Schlegel at Belding, Mich.

Earl Adgate has opened a meat market in the Hunter block, Saranac, Mich.

W. J. Musiel has purchased a half interest in the butcher shop at Stites, Ida., of Norman Musiel.

The Pioneer Meat Market, Wilson Creek, Wash., was burglarized of a considerable quantity of bacon recently.

Frank Schwartz has succeeded to the meat business of Schwartz & Hoffman in Northport, Wash.

Crawford & Derselt have succeeded to the meat and grocery business of C. D. Marvin at Bakersfield, Cal.

John Kann is about to engage in the meat business at Platte Center, Neb.

Malle & Cappelletti opened a meat market in Lohrville, Wis.

A. P. Bayorgeon, a meat dealer in Kaukauna, Wis., died at the age of 53 years.

W. L. Orr and Erastus Orr, proprietors of Orr Brothers' meat market in Manistique, Mich., have decided to discontinue the business.

John F. Anderson, proprietor of a meat market in Superior, Wis., has died.

Paul Westfall and William Catles have formed a partnership and will operate the Superior Meat Company, Superior, Idaho.

A new butcher shop will be opened at 813 East Third street, Franklin, Ohio, by William Darmody & Son.

The Northern Pacific Meat Market, 321 Northern Pacific avenue, Fargo, N. D., has been purchased by Gist. Noren.

J. J. Morrison of Seneca, Ill., has purchased the Fowler Meat Market in Vinton, Iowa.

William Berry has taken charge of the meat market in Colby, Wis., recently conducted by his brother, Ed. Berry.

Frank B. Lake, grocer and butcher, 916 W. Madison street, Chicago, Ill., has filed a petition in bankruptcy showing liabilities of \$1,966.56 and assets of \$224.35.

A meat market in Minneapolis, Minn., has been purchased by Theodore Schaefer of Brainerd, Minn.

H. W. Steifman has moved his meat business from 102 Seventh street to the Grant Avenue Grocery, Grant and North avenues, Rockford, Ill.

Adam Weiler has purchased a meat market at Richardton, N. D.

Gregory & Son, Inc., Kingston, Pa., to deal in meats, etc., has been incorporated with a capital stock of \$15,000.

John Ballent and Rose Henig, who conducted a meat market in Stratford, Conn., have filed petitions in bankruptcy.

YORK REFRIGERATING EQUIPMENT.

(Concluded from page 35)

Bert Stahl, ice cream, Mt. Pleasant, Pa.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete. We installed a machine of the same type and size for Mr. Stahl last fall, this new one doubling the capacity of his plant.

Furnas Ice Cream Company, Morristown, Ind.; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

L. Provenger, meat market, Claremont, N. H.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Minneola Creamery Company, Wanamingo, Minn.; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Winter Bros., meats, Elm Grove, W. Va.; one 4-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Hackmaster & Reynolds, creamery and ice cream, Canton, S. D.; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Price Grace Manufacturing Company, ice cream, Albany, Ga.; one 8-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

John Zelinski, meat market, Hegewisch, Ill.; a 1-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high-pressure side complete.

Haloid Company, photographic papers, Rochester, N. Y.; an 8-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine, and high-pressure side complete.

Millsboro Condensed Milk Company, Hillsboro, Wis.; one 20-ton vertical single-acting

enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine, and high-pressure side complete.

Minneapolis Artificial Ice Company, Minneapolis, Minn.; 7,290 feet of 2-inch full-weight piping for ice storage room.

Quitman Ice & Bottling Works, Quitman, Ga.; a generator and analyzer for their absorption ice-making machine, of 15 tons ice-making capacity.

Sinclair Oil & Gas Company, Tulsa, Okla.; 28 atmospheric gasoline coolers, each 30 feet long, 11 pipes high, made of 2-inch pipe.

CHICAGO LIVESTOCK MARKET.

(Concluded from page 31)

that the talent might have as to continued liberal supplies, and as a consequence a sharp reaction of 10@15c. took place, extreme top being \$15.45, with the bulk of the good weighty hogs selling at \$15.25@15.40, and other grades largely from \$15@15.25. Our salesmen again set the pace by selling a load of 275 lb. hogs at \$15.55 per cwt. This is the second time that "National" salesmen have obtained \$15.55 for hogs within a week, and the price is the highest on record in Chicago. Expected fine weather will undoubtedly stimulate considerable activity in the fields, and this, combined with the fact that the supply of marketable hogs is very moderate indeed, promises to bring forth a very light April run. In fact, in proportion to the tremendous demand the supply will probably be totally inadequate for the requirements of the trade; consequently all we can see to it is still higher prices.

While the week opened on Monday with a fairly active sheep and lamb trade, and but little decline in values, Tuesday's session proved a dull and tedious affair with but little trading done until after the noon hour. Finally bulk of receipts were cleaned up at a decline of 15@25c. per cwt. as compared with Monday's average. Usually at this season of year the gap between clipped and woolled stock begins to narrow, but the reverse of such a condition prevails this season. The urgent demand centers in woolled stock, and already there is a difference of fully \$3 per cwt. between the clippers and those carrying fleece, while buyers claim that there should be a difference of 50c.@\$1 per cwt. more, judging from fleeces of the clipped and woolled skins. We quote: Good to choice lambs, \$15@15.25; well woolled shearing lambs, \$14.75@15.25; poor to medium, \$14@14.50; culls, \$12@13; choice light yearlings, \$14@14.25; medium fleshed and heavy yearlings, \$13@13.75; well finished aged wethers, \$12.60@12.85; well finished ewes, \$12.25@12.50; poor to medium, \$11.50@12; culls, \$9@10; good to choice clipped lambs, \$12.25@12.40; fair to best clipped yearlings, \$11@11.40; well finished clipped wethers, \$10.60@10.85; shorn ewes, \$9.50@10.25.

HIDE AND SKIN MARKETS.

(Concluded from page 30)

CALFSKINS.—The market is dull and easy. New York cities last sold at \$4.50, \$5 and \$5.50 and offerings of skins at these prices today attract but little attention from tanners. It is understood a bid of 25c. under dealers' prices on New York cities 719 lbs., and 9½ lbs. was declined. Straight outside cities are held and offered at \$4.25, \$4.75 and \$5.25. Mixed outside cities and countries are quoted at \$4, \$4.50 and \$5, and countries are offered in various sized lots at \$3.50, \$4 and \$4.50. B. A. dry Nonats 2¼ to 3½ lbs. are offered at 44c. for shipment. Prices on New York city green skins No. 1 was reduced 5c. per lb. this week to butchers. Kips were reduced 5c. per piece.

HORSEHIDES.—The market is slow and very little new trading is noted. Good city renderer hides are offered at \$10, with offerings noted from large western dealers at 50c. more. Straight city renderers are nominally quoted at \$10@10.50. Mixed cities and countries are offered at \$9.25@9.50, and countries are quoted around \$9. About 350 country hides are reported sold at \$9 flat for No. 2's. A small lot of renderer hides sold at \$9.75 flat. A car of western hides 50 to 55 lbs.

average was offered at \$9 flat. There are some good-sized offerings of French hides noted.

DRY HIDES.—The market is quiet and no changes are noted. Few sales are reported from hides on spot, and what little trading is consummated has no material effect on the market. In common varieties trading at the present time is flat. Importers claim they are holding firm at nominal quotations on Bogotas, Puerto Cabellos and Central Americans, etc. Buyers are in a stand off position awaiting developments and claiming that receipts of hides are continually adding to stocks on hand, and conditions generally are in their favor. Small sales were recently made of Bogotas at 43c. on basis for Mts., and another sale of a small lot was reported made at 42c. on basis for Mts. Most importers decline to entertain these figures when bid by buyers. A little activity is noted in Peruvians with a sale reported of 1,000 flint dry Peruvians at 42c. About 2,000 flint dry Santo Domingos sold at 38c. Chinas continue quiet. Recent sale of Prime Hankows under 24 lbs. have been made at 23½c. Offerings are noted today of Hankows under 24 lbs. at 23@23½c. for primes and seconds about 2-3d. Brazils are held firm with some importers quoting Cearas 21 lbs. average at 52½c. Last sales of Cearas were at 50½c. Sales are noted at Peruvians to arrive at 41c. Last sales of Mexican Tampicos, etc., were made at 41½c. About 800 Honduras sold at 41c. and 300 country Guatemalas sold at 42c. About 8,000 Nigerians 14 to 15 lbs. average sold at 31c. flat New York reweight basis. The River Plate market is quiet, and no recent trading is noted. B. A. kips are offered at prices running from 49@51½c. Regular season hair B. A. hides 30 per cent. desechos are offered at 43@44c.

WET SALTED HIDES.—The River Plate market showed a little activity this week. About 4,000 La Plata steers sold at 33½c. Also 8,000 Tusaman Matadero steers sold to England at prices ranging from 22½@24c. according to regulars or unwashed. Another sale was made of 7,000 Saladero steers to Sweden, consisting of 2,000 Amaco Hervidero steers at 32c. and 2,000 cows at 29½c. About 10,000 La Plata steers sold at 33½c. About 5,000 of these hides going to England and the remainder to the United States. Another sale is noted of 5,000 La Plata cows at 29½c., all for the United States. The spot market is quiet. A few sales are noted of Mexican campos at 24c. Vera Cruz rastroos are offered at 29c. There are several lots of Rio Janeiros on spot which as yet have not been sold and buyers' ideas are low on these. Cubans are quiet, although a sale is noted of about 5,000 Havana regulars 40 to 45 lbs. average at 24c.

Boston

The hide market in Boston rules dull. Tanners are awaiting developments in Washington, but are a little surer in their position that leather is going to be worth more money. Ohio buffs have been slow to move here, but are still quoted at prices ranging from 22½@24c. The outside price has not been realized, and most of the business that has been going on for the last two or three weeks has been done between 22½@23c.. The extreme market is quiet, but fairly steady at 25¼@27c. Dealers are not accepting concessions unless they are in absolute need of money as they feel that the market is going stronger. The southern hide market is quiet with prices relatively firm. Far southern are quoted at 22@22½c. Middle southern are offered at 22½@23½c. Northern southern are offered at 24c., and hides free of ticks from the best sections of the South are offered at 25c.

The market on New England calfskins is unchanged. Tanners are not looking for stock, and dealers have only meagre supplies to offer. It is impossible to determine the market price on these skins as there has been but very little trading, but dealers think that somewhere between \$3.25 and \$3.50 is the value of the 5 to 7-lb. skins. It is probable that the emergency contract for the United States army shoes which requires veals will have a strengthening effect on the heavier calfskins.

New York Section

E. S. Stover, auditor for Wilson & Company in New York, returned this week from a trip to the West.

Gerb's meat market has been incorporated to do business in Brooklyn, with Regina and James Gerb and Adolph Weiss as incorporators.

Swift & Company's sales of beef in New York City for the week ending March 31 averaged as follows: Domestic beef, 14.88 cents per pound.

C. B. Duffy, of Swift & Company's beef department at Chicago, W. F. Jackson, of the produce department, and C. E. Johnson of the beef grading department, were New York visitors during the week.

They have been having kosher meats riots in Cleveland, Chicago and other cities where there is a considerable Hebrew population. The New York trouble was settled last week after an agreement on prices between wholesalers and retailers.

In the matter of H. W. Keen Co., Inc., bankrupt, formerly of 117 Lawrence street, Brooklyn, a meeting of creditors was held before the referee in bankruptcy, and Benjamin Fisher, of Wilson & Co., Inc., was appointed trustee, and Leon Dashew was appointed to represent him as counsel.

The Cudahy Packing Company branch at Westchester avenue will be very much in evidence on the evening of April 7, when they will give their second annual beefsteak dinner at the Campus. The music will be by Leonard C. Habus, of the famous tango orchestra, and great doings are expected.

Vincent Astor's model public market at Broadway and 95th street has been sold, or rather traded for apartment house property, the Jesup estate being the other party to the trade. Then Adolph Lewisoohn bought the market for cash as an investment. It has not been a success operated on the public market plan.

For fifteen years with the Star Beef and Provision Company—is some record, of which Sam Goldsmith is justly proud. He has recently severed his connection with this firm and is now manager for Max Greenebaum in the big Queensboro Bridge Market on 59th street, west of First avenue, where he is building up a big business.

The following is a report of the number of pounds of meat, fish, poultry and game seized and destroyed in the City of New York during the week ending March 31, 1917, by the New York City Department of Health: Meat—Manhattan, 2,854 lbs.; Brooklyn, 27,772½ lbs.; Queens, 25 lbs.; total, 30,651½ lbs. Poultry and Game—Manhattan, 349 lbs.

A bill has been introduced at Albany by Assemblyman Smith, making it "a felony for any one to withhold or agree to withhold from

sale or distribution any food or foodstuffs of any kind or nature used in any form as food for human consumption, for the purpose of diminishing the supply thereof or for the purpose of securing an excessive price therefor."

Three of the remaining four Johnson avenue, Brooklyn, abattoir men who had been indicted for attempting to bribe a Board of Health inspector to pass meat unfit for consumption, pleaded guilty on Monday before County Judge Roy. They were Philip Strauss, of 911 St. Mark's avenue; Aaron Schick, of 1049 Sterling place, and David Feinberg, of 2869 West Twenty-second street, Coney Island. Robert Plaut, Sr., is the only one of the indicted butchers now awaiting trial.

After eight years in a small shop, A. Pourquoy, at No. 457 Seventh avenue, has doubled the size of his store by taking the store next door, breaking through the walls, and made one large handsome store of them both. This move was made necessary because the volume of business has been steadily increasing. Many of the neighboring hotels, clubs and restaurant have done business with Mr. Pourquoy for years, which shows that he handles the best of goods of all kinds all the year around, regardless of price. His first department is a very important part of the business. Anything that swims and is edible can be found there at all times.

A business that has been growing so rapidly that larger quarters must be found is that of A. Kahn of No. 723 Tenth avenue, who has discontinued catering to the retail trade altogether because of the huge volume of hotel, club, steamship and restaurant trade that he has built up in the past few years. Mr. Kahn has been recognized as a very hard worker in the trade, and deserves, his success. The amount of meats and poultry sold over the telephone and by telegraph would make the ordinary shop keeper sit up and take notice, as his long distance telephone and telegraph bills amount to more than the ordinary shop rent, light and wagon upkeep. At 4 a. m. Mr. Kahn is on the job, and his day ends when he is through. He will be heard from later, if his plans are carried out.

Another example of the effect of progressiveness, square business methods and courteous treatment to customers, large or small, has come to notice in the growth of the New York branch of a western packer. A short time ago the J. S. Hoffman Company of Chicago opened a small branch at No. 192 Duane street, New York City. Their methods of doing business made a hit, and the business grew so fast that it became necessary to take larger quarters. They have leased the six-story building at No. 181 to 183 Franklin street, and are remodeling it from cellar to roof. They are equipping it with large modern coolers, installed by the United Cork Company, to suit the requirements of their business for the handling of a complete line of sausage, dried beef, corned beef and imported cheese, and expect to be ready for business about April 15. Mr. Sol. Sal-

inger, who has had years of experience in this line, is manager of the New York branch, whose firm name is to be J. S. Hoffman, Inc.

EARLY SATURDAY NIGHT CLOSING.

The movement which is on foot to close all butcher shops at 10 o'clock on Saturday nights is making good progress under the able management of Joseph Lichtenfield, Louis Schull and George Schilling. They aroused so much interest that a meeting was held at Mutual Hall, No. 458 Ninth avenue, on Thursday night, and circulars were liberally distributed announcing it. Details of this meeting will be printed in the next issue of The National Provisioner.

This is almost as good a move as the Sunday-closing movement of years ago, which was brought to so successful a finish by the Benchmen's Association, notwithstanding the fact that thousands of butchers were convinced that such a thing was utterly impossible at that time. Not one self-respecting butcher today would open on Sunday morning, even if it were not a law, and there is no doubt this new movement will be followed along precisely the same lines.

Much opposition will be found at first, but it must be recognized as a real necessity, for the boss butcher as well as his employees. From 5:30 or 6 a. m. on Saturday to 10 on Saturday night is entirely too long as it is, without the additional 2 or 2½ hours' work they all put in now.

There is no doubt that every fair-minded boss will be willing to accede to this new arrangement, because precisely the same volume of business will be done once the trade knows that it is to be a cast-iron rule. And if there should be one or two in a neighborhood or district who refuse to close, it will not take very long for the benchmen of that district to "get wise." Once their secretary is notified of the state of affairs and he interviews the backslider, the latter will quickly realize that he is doing himself more harm than anyone else, particularly if he is in a neighborhood where working people reside. It will not take long to achieve this reform if all are willing to pull together.

EASTERN MEAT MARKETS.

The office of markets of the United States Department of Agriculture reports meat trade conditions for April 5 at three Eastern markets as follows:

Beef.

BOSTON—Beef, fresh: Few arrivals; market steady to strong; demand fair. Kosher Beef: Receipts increasing; market a little easier; demand fair; increased consumption of poultry reduces the demand. Hinds and Ribs: No report. Native Steers: Receipts light; market steady to higher; demand fair. Western Steers: Receipts light; market firm; demand fair. Texas Steers: Few arrivals; market to strong; demand fair. Heifers: Receipts light; prices slightly higher; demand good. Cows: Receipts increasing; good cows, few arrivals; market steady to higher; better grades selling well. Bulls: Receipts light; market steady; demand fair.

NEW YORK—Beef, fresh: Receipts moderate; market steady; demand slow

Kosher Chucks and Plates: Supply normal; market comparatively quiet; poor demand. Hinds and Ribs: Supply normal; market unchanged; all grades selling slowly. Native Steers: Receipts moderate; market steady; demand slow. Western Steers: Receipts light; market unchanged; poor demand. Texas Steers: Few arrivals; market steady; few sales. Heifers: Supply very light; no change in the market since Wednesday; few sales. Cows: Receipts moderate; market steady; lower grades selling slowly. Bulls: Receipts moderate; market strong; demand fair.

PHILADELPHIA.—Beef, fresh: Receipts light; prices slightly lower; all grades selling slowly. Kosher Beef: Supply normal; market comparatively quiet; Jewish holiday reduces the demand. Hinds and Ribs: Supply normal; market unchanged; demand moderate. Native Steers: Receipts light; market dull and prices a shade lower; demand slow. Western Steers: Few arrivals; market draggy; demand light. Texas Steers: No report. Heifers: No report. Cows: Supply light; market steady to weak; demand slow. Bulls:

No fresh arrivals; market unchanged; few sales.

Veal.

BOSTON.—Receipts heavy; market strong at Wednesday's prices; good demand for all grades.

NEW YORK.—Receipts liberal; market fairly steady; good demand for better grades.

PHILADELPHIA.—Receipts light; market strong; demand generally good.

Pork.

BOSTON.—Receipts normal; market steady; poor demand.

NEW YORK.—Supply slightly exceeds the demand; prices steady to lower; demand slow.

PHILADELPHIA.—Receipts light; market fairly steady; demand moderate.

Lambs.

BOSTON.—Receipts liberal; market unchanged; good demand for better grades.

NEW YORK.—Receipts normal; market steady; lighter weights preferred.

PHILADELPHIA.—Receipts normal; market a little easier; heavy weights not wanted.

Mutton.

BOSTON.—Receipts light; market firm; demand fair.

NEW YORK.—Receipts light; market steady; demand fair.

PHILADELPHIA.—Receipts light; market steady; demand fair.

Wholesale meat prices on April 4 are reported as follows on fresh beef, Western dressed:

Native steers—			
	Boston.	New York.	Philadelphia.
Choice	\$16.25@16.50	\$16.00@16.50	\$16.00@16.50
Good	15.75@16.25	15.50@16.00	15.50@16.00
Medium	—@—	15.00@15.50	15.00@15.50
Common	—@—	14.00@15.00	14.00@15.00
Western steers—			
Good	15.25@15.75	15.00@15.50	14.75@15.50
Medium	—@—	14.00@15.00	—@—
Texas steers—			
Good	14.50@14.75	14.00@14.50	—@—
Common	14.00@14.50	13.50@14.00	—@—
Heifers—			
Good	14.50@15.00	14.50@15.00	—@—
Cows—			
Good	14.00@14.50	13.50@14.25	14.00@14.50
Common	13.00@14.00	12.50@13.50	12.50@13.50
Bulls—			
Good	12.50@13.00	13.00@13.50	13.00@13.50
Common	12.00@12.50	12.25@13.00	12.00@13.00

Prepare now for your needs on



Hawaiian Pineapple

Stronger and stronger grows our great nation-wide drive on Libby's Hawaiian Pineapple—

Greater and greater grows the demand for it from the housewives of America.

Our advertising is going into the best homes in your town—in **your own neighborhood**. More and more of your customers will continually want Libby's Hawaiian Pineapple.

Are you prepared? Check your stock **now**—don't wait until the last moment and take chances of being caught "short."

Your jobber will accept your order now for Libby's Hawaiian Pineapple. Send it to him today.

Libby, McNeill & Libby, Chicago

BANKRUPTCY AUCTION SALE M. ZIMMERMANN CO. ASSETS

Charles Shongood, United States Auctioneer, sells Monday, April 16th, 1917, at 10.30 a. m., at 318 East Houston Street, New York City, sausage-making machinery and equipment, including mixers, grinders, choppers, racks, scales, stuffers, power plant, machinery, and equipment, Corliss engine, electric generators, ice machines pumps, shafting, pulleys, belting, tool and machine shop equipment, drill press, vises, drills, files, pipe cutters, &c., office furniture and fittings, adding machine, typewriter, time-recording clocks, &c.

At 90 East Third Street: Sausage-making machinery and equipment, power plant and machinery, Corliss engine, ice machines, shafting, belting, tools, pipe fittings, &c.

At 400 East Third Street: Wagons, trucks, automobiles, including Chase car, 2 Auto cars, Hudford, 2 Fords, hay, straw, &c.

ARTHUR F. GOTTHOLD,
Trustee,
60 Wall Street,
New York City.

Leon Lauterstein,
Attorney for Trustee,
55 William Street,
New York City.

NEW YORK MARKET PRICES

LIVE CATTLE.

Steers, ordinary to fairly prime.....	\$0.25@12.10
Oxen	—@—
Bulls	7.50@10.00
Cows, common to prime.....	4.25@ 8.45

LIVE CALVES.

Live calves, common to prime, per 100 lbs.....	12.50@16.50
Live calves, skim milk	9.00@10.50
Live calves, Canada	8.00@13.50
Live calves, culls, per 100 lbs.....	9.00@12.00

LIVE SHEEP AND LAMBS.

Live lambs, unshorn, fair to good.....	13.50@15.75
Live lambs, clipped	@13.50
Live sheep, unshorn, common.....	9.00@11.00
Live sheep, clipped	@10.50

LIVE HOGS.

Hogs, heavy	@16.00
Hogs, medium	@16.00
Hogs, 140 lbs.....	@15.50
Pigs	@15.25
Roughs	@14.75

DRESSED BEEF.

CITY DRESSED.

Choice native heavy	16½@17
Choice native light	16@16½
Native, common to fair	15½@15½

WESTERN DRESSED BEEF.

Choice native heavy	16@16½
Choice native light	15½@16
Native, common to fair	15@15½
Choice Western, heavy	15@15½
Choice Western, light	@15
Common to fair Texas	14@14½
Good to choice helfers	@15
Common to fair helfers	14@14½
Choice cows	13½@14
Common to fair cows	@13½
Fresh Bologna bulls	14@14½

BEEF CUTS.

	Western.	City.
No. 1 ribs	18@19	19@20
No. 2 ribs	16½@17½	@18
No. 3 ribs	15@15½	@17
No. 1 loins	18@19	21@22
No. 2 loins	16½@17½	@20
No. 3 loins	15@15½	@17
No. 1 hinds and ribs	@19	18@18½
No. 2 hinds and ribs	@17	17@17½
No. 3 hinds and ribs	@16	16@16½
No. 1 rounds	@15½	@16½
No. 2 rounds	@15	@15½
No. 3 rounds	@14½	@15½
No. 1 chucks	@15½	@16
No. 2 chucks	@15	@15½
No. 3 chucks	@14	@15

DRESSED CALVES.

Veals, city dressed, good to prime, per lb.	@23
Veals, country dressed, per lb.....	@20
Western calves, choice	@21
Western calves, fair to good.....	@18½
Grassers and buttermilks	@15

DRESSED HOGS.

Hogs, heavy	@19½
Hogs, 180 lbs.....	@19½
Hogs, 160 lbs.....	@20½
Hogs, 140 lbs.....	@20½
Pigs	@20½

DRESSED SHEEP AND LAMBS.

Spring lambs, choice	@20
Lambs, choice	@19
Lambs, good	@18
Lambs, medium to good.....	@17
Sheep, choice	@19½
Sheep, medium to good	@17½
Sheep, culls	@14½

PROVISIONS.

(Jobbing Trade.)

Smoked hams, 10 lbs, avg.....	@24
Smoked hams, 12 to 14 lbs, avg.....	@24
Smoked hams, 14 to 16 lbs, avg.....	@24
Smoked picnics, light	18½@19
Smoked picnics, heavy	18½@18½
Smoked shoulders	@18½
Smoked beef tongue, per lb.....	@30
Smoked bacon (rib in)	@24
Dried beef sets	@32
Smoked beef tongue, per lb.....	@30
Pickled bellies, heavy	@23

FRESH PORK CUTS.

Fresh pork loins, city.....	@23
Fresh pork loins, Western.....	@25
Frozen pork loins	@23
Fresh pork tenderloins.....	@30
Frozen pork tenderloins	@26
Shoulders, city	@24
Shoulders, Western	@19½
Butts, regular	@22
Butts, boneless	@25
Fresh hams, city	@26
Fresh hams, Western	@22½
Fresh picnic hams	@18

BONES, HOOFS AND HORNS.

Round shin bones, avg. 48 to 50 lbs.	per 100 pcs. 82.00@ 85.00
Flat shin bones, avg. 40 to 45 lbs. per 100 pcs.	72.50@ 75.00
Block hooft, per ton.....	52.50@ 55.00
Striped hooft, per ton.....	52.50@ 55.00
White hooft, per ton	70.00@ 72.50
Thigh bones, avg. 85 to 90 lbs. per 100 pcs.	@140.00
Horns, avg. 7½ oz. and over, No. 1's.....	170.00@185.00
Horns, avg. 7½ oz. and over, No. 2's.....	@125.00
Horns, avg. 7½ oz. and over, No. 3's.....	@ 90.00

BUTCHERS' SUNDRIES.

Fresh steer tongues, L. C. trim'd.....	@25c. a pound
Fresh steer tongues, untrimmed.....	@19c. a pound
Fresh cow tongues	@15c. a pound
Calves' heads, scalded.....	@85c. a piece
Sweetbreads, veal	@40 a pair
Sweetbreads, beef	@35c. a pound
Calves' livers	@30c. a pound
Beef kidneys	@14 a pound
Mutton kidneys	@15c. a pound
Livers, beef	@12 a pound
Oxtails	@11 a piece
Hearts, beef	@10 a pound
Rolls, beef, Western	@19 a pound
Tenderloin, beef, Western	@35 a pound
Lambs' Fries	@10c. a pound
Extra lean pork trimmings.....	@21½c. a pound
Blade meat	@17c. a pound

BUTCHERS' FAT.

Ordinary shop fat	@ 9
Suet, fresh and heavy	@ 9
Shop bones, per cwt.....	25@35

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	•
Sheep, imp., medium wide, per bundle.....	•
Sheep, imp., medium, per bundle.....	•
Sheep, imp., narrow, per bundle.....	•
Hog, free of salt, tcs. or bbls., per lb., f. o. b. New York.....	@70
Hog, extra narrow, selected, per lb.....	@85
Hog, middles	@18
Beef rounds, domestic, per set, f. o. b. New York	@21c.
Beef rounds, export, per set, f. o. b. New York	@14
Beef bungs, piece, f. o. b. New York.....	@20
Beef middles, per set, f. o. b. New York.....	@15
Beef weasands, No. 1s, each	@40
Beef weasands, No. 2s, each	@8½
Beef bladders, small, per doz.....	@4
	@80

*Owing to unsettled war conditions reliable sheep casing quotations cannot be given.

SPICES.

	Whole.	Ground.
Pepper, Sing., white	25½	27½
Pepper, Sing., black	25	27
Pepper, Penang, white	25	27
Pepper, red	16	19
Allspice	6½	8
Cinnamon	21	25
Coriander	21	23
Cloves	23	26
Ginger	18	21
Mace	58	62

CURING MATERIALS.

Refined saltpetre, granulated	@31
Refined saltpetre, crystals	@37
Refined nitrate of soda, gran., f. o. b. N. Y. 5	@ 5½
Refined nitrate of soda, crystals.....	5½@ 5½

GREEN CALFSKINS.

No. 1 skins	@.55
No. 2 skins	@.53
No. 3 skins	@.53
Branded skins	@.43
Ticky skins	@.43
No. 1 B. M. skins.....	@.53
No. 2 B. M. skins.....	@.21
No. 1, 12½-14.....	@5.25
No. 2, 12½-14.....	@5.00
No. 1 B. M., 12½-14.....	@5.50
No. 2 B. M., 12½-14.....	@2.45
No. 1 kips, 14-18.....	@5.75
No. 2 kips, 14-18.....	@5.50
No. 1 B. M. kips, 14-18.....	@5.50
No. 2 B. M. kips.....	@2.25
No. 1 heavy kips, 18 and over.....	@6.75
No. 2 heavy kips, 18 and over.....	@6.50
Branded kips	@4.75
Heavy branded kips	@5.75
Ticky kips	@4.75
Heavy ticky kips	@5.75

DRESSED POULTRY.

TURKEYS.

Barrels—Dry-packed—	
Western, dry-picked, young avg., best.....	25 @30
Western dry-picked, young hens, fancy....	—@—
Western, old hens or toms.....	25 @30
Texas, fair to good	25 @30

CHICKENS.

Fresh, dry-picked, 12 to box—	
Western, milk-fed, all sizes, coarse and staggy	21 @24
Western, corn-fed, all sizes, coarse and staggy	19 @22

Fresh soft-meated, barrels—

Phila. and L. I. fancy broilers, per lb.....	45 @50
Philadelphia, 10 to 12 lbs., to pair.....	30 @32
Western, milk-fed, all sizes.....	19 @22
Western, corn-fed, all sizes.....	18 @20

Capons—

Philadelphia, fancy, 8 to 10 lbs.....	@35
Philadelphia, fancy, 7 lbs. each.....	32 @33
Philadelphia, small and slips.....	30 @31
Western, fancy, 8 lbs. and over each.....	32 @32
Western, fancy, 6 to 7 lbs. each.....	28 @31
Western, small and slips.....	25 @26

Fowls—12 to box, dry-packed—

Western, boxes, 60 lbs. and over to doz., dry-picked	25 @25½
Western, boxes, 48 to 55 lbs. to doz., dry-picked	25 @25½
Western, boxes, 43 to 47 lbs. to doz., dry-picked	24½ @24½
Western, boxes, 36 to 42 lbs. to doz., dry-picked	23 @23
Western, boxes, 30 to 35 lbs. to doz., dry-picked	21 @21
Western, boxes under 30 lbs. to doz.....	20 @20

Fowl—Barrels, dry-packed—

Western, boxes, 5 lbs. and over.....	@25
Western, boxes, 4 to 4½ lbs., dry-picked.....	@25
Old Cocks, per lb.....	@19
Southern and S.W., large	—@—

Other Poultry—

Squabs, prime, white, 10 lbs. to doz., per doz.....	@ 5.00
Long Island Spring Ducklings.....	@26

Ducks and Geese—Frozen—

Ducks, Long Island	@23
Ducks, wn., fancy	@22
Ducks, wn., No. 2.....	18 @20
Geese, western, fancy	18 @18
Geese, western, fancy, No. 2.....	14 @15

LIVE POULTRY.

Chickens, course and staggy	—@—
Fowls, average	@27
Roosters, old	—@—
Turkeys	24@25
Geese	15 @15
Ducks	23 @23

BUTTER.

Creamery, extra (92 score).....	@44½
Creamery, higher (scoring lots).....	44 @44½
Creamery, Firsts	40 @44
Process, extras	38½ @34
Process, Firsts	33 @33½

EGGS.

Fresh gathered, extras	35 @35½
Fresh gathered, extra firsts	34½ @34½
Fresh gathered, firsts	33½ @34
Fresh gathered, seconds	31½ @33
Fresh chex, good to choice.....	30 @31

FERTILIZER MARKETS.

BASIS NEW YORK DELIVERY.

Bone meal, steamed, 3 and 50, per ton	@30.00
Bone meal, raw, per ton.....	@35.00
Dried blood, high grade.....	@ 4.50
Nitrate of soda—spot	@ 3.90
Bone black, discard, sugar house del. New York	nom. 40.00
Ground tankage, N. Y., 9 to 12 per cent. ammonia	4.80 and 10c.
Garbage tankage	@10.00
Fish scrap, dried, 11 p. c. ammonia and 15 p. c. bone phosphate, delivered, Baltimore	—@—
Foreign fish guano, testing 13@14% ammonia and about 10% B. Phos. Lime	—@—
Wet, acidulated, 7 p. c. ammonia per ton, f. o. b. factory (35c. per unit available phos. acid).....	—@—
Sulphate ammonia, for shipment, per 100 lbs., guar., 25%	@ 5.50
Sulphate ammonia, per 100 lbs. spot guar., 25%	@ 5.50

